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NEW MEXICO STATE UNIV LAS CRUCES PHYSICAL SCIENCE LAB F/G 19/4
FIXED CAMERA DATA DUSTY INFRARED TEST-I (DIRT-I) 2 OCTOBER THRO--ETC(U)
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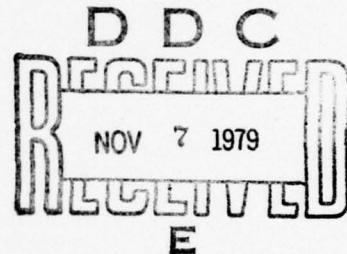
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FIXED CAMERA DATA DUSTY INFRARED TEST-I (DIRT-I) 2 OCTOBER THROUGH 14 OCTOBER 1978

AUGUST 1979



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US Army Electronics Research and Development Command
ATMOSPHERIC SCIENCES LABORATORY
White Sands Missile Range, NM 88002

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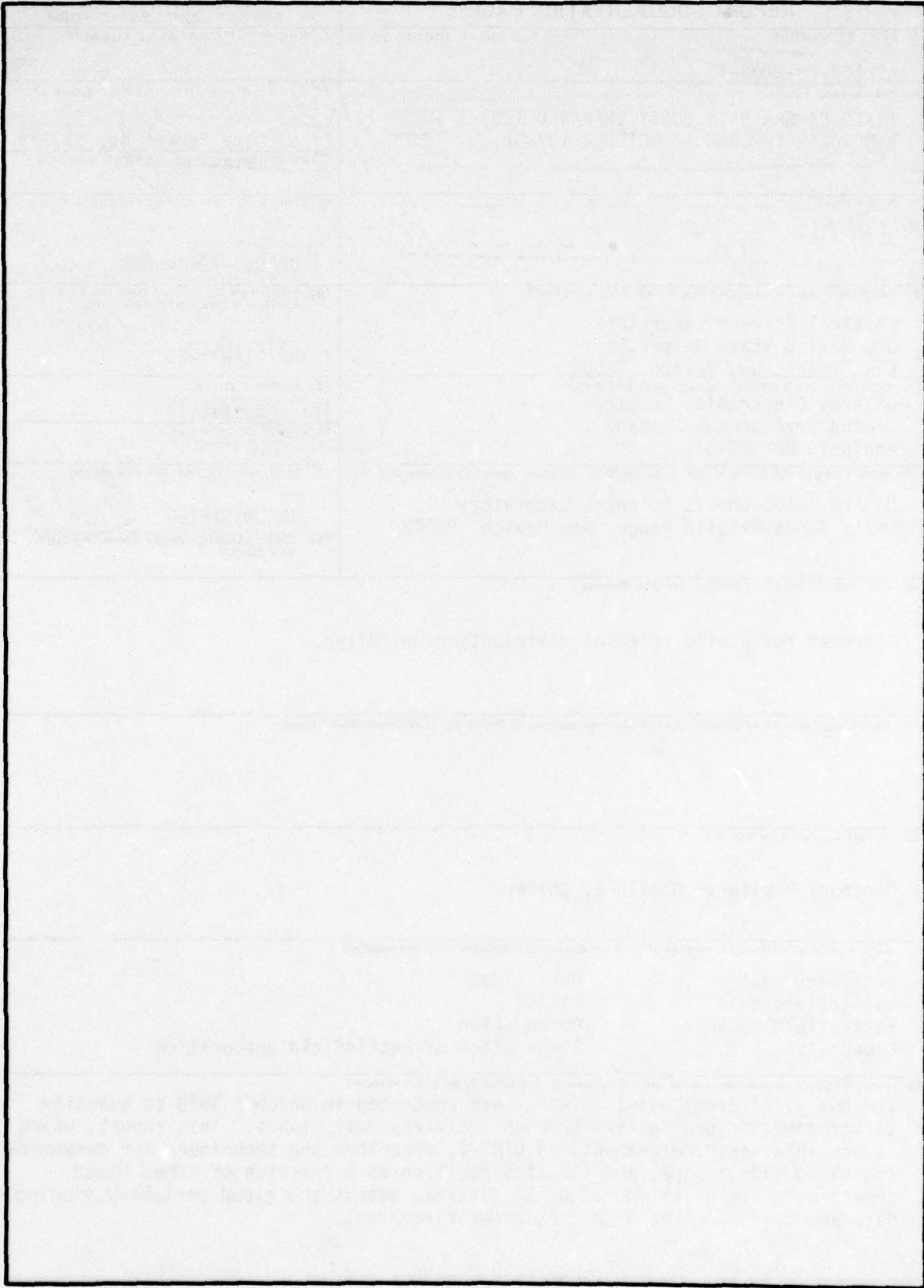
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DUSTY INFRARED TEST-I
FIXED CAMERA DATA REDUCTION REPORT

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DIRT-I
FIXED CAMERA DATA REDUCTION REPORT

INTRODUCTION

Dusty Infrared Test-I (DIRT-I) conducted at White Sands Missile Range 2 Oct 1978 through 14 Oct 1978 utilized a variety of explosive events to create dust clouds and diesel oil-rubber-gasoline fires to create smoke clouds. The complete list of tests is shown in Table 2.1.

Technical photographic support was provided by four 35 mm cameras at two sites; data reduced from these records are presented in this report and include:

- A. detonation (or impact) times;
- B. times of payload entry into dust cloud and exit from cloud;
- C. dust cloud growth data consisting of
 - 1. stem width;
 - 2. cloud width;
 - 3. height at cloud top;
 - 4. centroid coordinates;
 - 5. coordinates of left and right edges of stem;
- D. graphs and photographs depicting growth of smoke clouds from fire tests.

TABLE 2-1. EVENT SCHEDULE

| Date (Oct 1978) | Time (MDT) | Event | Size (1b) | Comments |
|-----------------------|---------------|-------|--------------|--|
| 2 | 0707 | A-1 | 3 | Three 1-lb TNT charges |
| 2 | 0718:30 | A-2 | 45 | Three 15-lb TNT charges |
| 2 | 0729 | A-3 | 90 | Three 30-lb TNT charges |
| 2 | 0739:50 | A-4 | 90 | Three 30-lb TNT charges |
| 3 | 0710 | B-1 | 45 | Three 15-lb TNT charges |
| 3 | 0723 | B-2 | 45 | Three 15-lb TNT charges |
| 3 | 0731 | B-3 | 90 | Three 30-lb TNT charges |
| 3 | 0741:10 | B-4 | 90 | Three 30-lb TNT charges |
| 3 | 0751:20 | B-5 | 180 | Three 60-lb TNT charges |
| 3 | 0801:25 | B-6 | 180 | Three 60-lb TNT charges |
| 3 | 0815 | B-7 | 360 | Three 120-lb TNT charges |
| 3 | 0828:25 | B-8 | 360 | Three 120-lb TNT charges |
| 5 | 0712:50 | C-1 | 2100 | One hundred and forty 15-lb charges |
| 6 | 0717:25 | D-1 | 36 | Twelve 3-lb TNT charges |
| 6 | 0730:40 | D-2 | 72 | Twelve 6-lb TNT charges |
| 6 | 0748:55 | D-3 | 144 | Twelve 12-lb TNT charges |
| 6 | 0807 | D-4 | 288 | Twelve 24-lb TNT charges |
| 10 | 0900 | C-2 | 2100 | One Hundred and Forty 15-lb TNT charges |
| 11 | 0747:40 | E-1 | 45 | Three 155-mm projectiles (TNT), static |
| 11 | 0757:10 | E-2 | 45 | Three 155-mm projectiles (TNT), static |
| 11 | 0821:45 | E-3 | 180 | Twelve 155-mm projectiles (TNT), static |
| 11 | 0829:05 | E-4 | 180 | Twelve 155-mm projectiles (TNT), static |
| 12 | 0737:10 | F-1 | 60 | Four 155-mm projectiles fired simultaneously |
| 12 | 0748:10 | F-2 | 180 | Twelve 155-mm projectiles, rapid fire |
| 12 | 0805:35 | F-3 | 180 | Twelve 155-mm projectiles, rapid fire |
| 12 | 0823:10 | F-4 | 120 | Eight 155-mm projectiles, rapid fire |
| 13 | 0738:10 | F-5 | 120 | Eight 155-mm projectiles, rapid fire |
| 13 | 0753:35 | F-6 | 120 | Eight 155-mm projectiles, rapid fire |
| 13 | 0808:20 | F-7 | 120 | Eight 155-mm projectiles, rapid fire |
| 13 | 0826:15 | F-8 | 45 | Three 155-mm projectiles fired simultaneously |
| 14 | 0739:50 | E-5 | 45 | Three 155-mm projectiles, 2-ft deep, static, 30° |
| 14 | 0756:00 | E-6 | 45 | Three 155-mm projectiles, 2-ft deep, static, 30° |
| 14 | 0808:45 | E-7 | 45 | Three 155-mm projectiles, 1-ft deep, static, 30° |
| 14 | 0823:55 | E-8 | 45 | Three 155-mm projectiles, 1-ft deep, static, 30° |
| 14 | 0836:10 | E-9 | 45 | Three 155-mm projectiles, surface, static, 30° |
| 14 | 0846:10 | E-10 | 45 | Three 155-mm projectiles, surface, static, 30° |
| 14 | 1056 | G-1 | - | Diesel oil, rubber, gasoline fire |
| 14 | 1105:30* | G-1 | - | Diesel oil, rubber, gasoline fire |
| 14 | 1108:50* | G-1 | - | Diesel oil, rubber, gasoline fire |
| 14 | 1111:05* | G-1 | - | Diesel oil, rubber, gasoline fire |
| 14 | 1113:55* | G-1 | - | Diesel oil, rubber, gasoline fire |
| 14 | 1116:40* | G-1 | - | Diesel oil, rubber, gasoline fire |
| 14 | 1119* | G-1 | - | Diesel oil, rubber, gasoline fire |
| 14 | 1122:55* | G-1 | - | Diesel oil, rubber, gasoline fire |
| 14 | 1125:15* | G-1 | - | Diesel oil, rubber, gasoline fire |
| 14 | 1127:15* | G-1 | - | Diesel oil, rubber, gasoline fire |
| 14 | 1129:35* | G-1 | - | Diesel oil, rubber, gasoline fire |
| 14 | 1132:45* | G-1 | - | Diesel oil, rubber, gasoline fire |

*Command for range cameras on; helicopter approximately 10 to 15 seconds from smoke cloud.

DIRT-I
FIXED CAMERA DATA REDUCTION REPORT, CONT'D

INSTRUMENTATION

Technical cameras were of 35 mm type and operated at approximate frame rates of 10/sec with black and white film. Their designations and coordinates are as follows:

WSTM COORDINATES

| <u>Camera Stations</u> | <u>X (ft)</u> | <u>Y (ft)</u> | <u>H (ft)</u> |
|------------------------|---------------|---------------|---------------|
| E-1326 and E-1327 | 560,227.44 | 195,738.33 | 4,266 |
| E-1328 and E-1329 | 555,492.55 | 185,165.07 | 4,353.51 |

Terrain and safety restrictions prevented camera site locations that would have provided lines of sight normal to the test area layout.

Focal lengths used for different events:

| <u>Event Type</u> | <u>FOCAL LENGTHS</u> | |
|-------------------|---|---|
| | <u>Camera Station</u> E-1326, E-1327 | <u>Camera Station</u> E-1328, E-1329 |
| A | 58 mm | 150 mm |
| B | 58 mm | 6 in. |
| C | 40 mm | 4 in. |
| D | 58 mm | 6 in. |
| E (1-4) | 58 mm | 150 mm |
| E (5-10) | 58 mm | 6 in. |
| F | 58 mm | 6 in. |

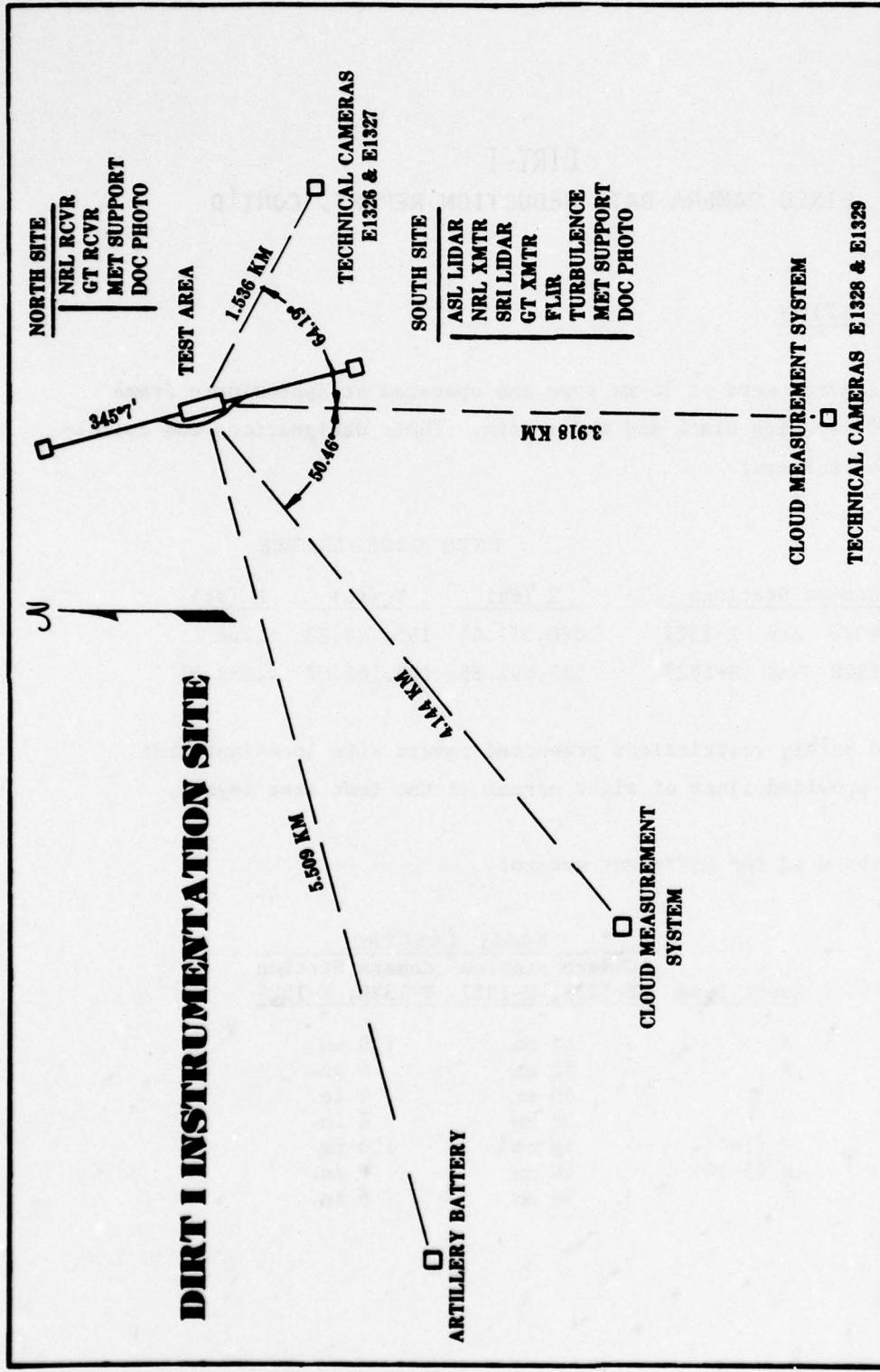


Figure 2-1. Plane view of DIRT-I site showing remotely located instrumentation and support elements. General location is in extreme southeast corner of White Sands Missile Range, New Mexico.

REDUCTION PROCEDURES

A. DETONATION TIMES

The designated detonation time is the time of the frame in which detonation could first be deemed to have taken place. At the frame rate of 10/sec used in these tests, the maximum error is less than 0.1 second. Not all detonations were observed, and some detonations were observed by only one camera. Where detonation was recorded by more than one camera, the time is given for each.

In tests involving projectiles rather than charges, impact time is assumed to correspond to detonation.

DETONATION TIMES
DETERMINED FROM PHOTOGRAPHIC RECORDS

| TEST | CAMERA STATION | DETONATION TIME HR MN SEC |
|------|-------------------|------------------------------|
| A2 | 1326 | 13 18 30.027 |
| A2 | 1328 | 13 18 30.070 |
| A3 | 1326 | 13 29 0.163 |
| A3 | 1328 | 13 29 0.150 |
| A4 | 1326 | 13 39 50.068 |
| A4 | 1328 | 13 39 50.098 |
| B1 | 1328 | 13 10 0.350 |
| B2 | 1327 | 13 22 0.0 |
| B2 | 1328 | 13 23 0.014 |
| B3 | 1327 | 13 30 59.879 |
| B3 | 1328 | 13 30 59.910 |
| B4 | 1327 | 13 41 10.070 |
| B4 | 1328 | 13 41 10.144 |
| B5 | 1327 | 13 51 19.912 |
| B5 | 1328 | 13 51 19.945 |
| B6 | 1327 | 14 1 25.225 |
| B6 | 1328 | 14 1 25.304 |
| B7 | 1326 | 14 15 0.016 |
| B7 | 1328 | 14 15 0.096 |
| C1 | 1326 | 13 12 50.348 |
| C1 | 1328 | 13 12 50.318 |
| D1 | 1326 | 13 17 25.014 |
| D1 | 1328 | 13 17 25.035 |
| D2 | 1326 | 13 30 39.959 |
| D2 | 1328 | 13 30 39.825 |
| D3 | 1326 | 13 48 54.926 |
| D3 | 1328 | 13 48 54.883 |
| D4 | 1326 | 14 7 0.254 |
| D4 | 1328 | 14 7 0.150 |
| C2 | 1326 | 15 0 0.474 |
| C2 | 1327 | 15 0 0.455 |
| E1 | 1326 | 13 47 39.794 |

DETONATION TIMES
DETERMINED FROM PHOTOGRAPHIC RECORDS

| TEST | CAMERA | STATION | DETONATION TIME |
|------|--------|---------|-----------------|
| | | | HR MN SEC |
| E1 | 1328 | | 13 47 39.840 |
| E2 | 1326 | | 13 57 10.011 |
| E2 | 1328 | | 13 57 10.025 |
| E3 | 1326 | | 14 21 44.829 |
| E3 | 1328 | | 14 21 44.900 |
| E4 | 1326 | | 14 29 5.260 |
| E4 | 1328 | | 14 29 5.245 |
| E6 | 1327 | | 13 56 0.400 |
| E7 | 1327 | | 14 8 45.165 |
| E8 | 1327 | | 14 23 55.170 |
| E9 | 1327 | | 14 36 10.038 |
| E10 | 1327 | | 14 46 10.269 |
| F1 | 1326 | | 13 37 28.440 |
| F1 | 1328 | | 13 37 28.555 |
| F2 | 1326 | | 13 48 28.314 |
| F2 | 1328 | | 13 48 28.329 |
| F3 | 1328 | | 14 5 57.700 |
| F4 | 1326 | | 14 23 28.703 |
| F4 | 1328 | | 14 23 28.848 |
| F5 | 1328 | | 13 38 28.168 |
| F6 | 1326 | | 13 53 53.173 |
| F6 | 1328 | | 13 53 53.263 |
| F7 | 1326 | | 14 8 38.169 |
| F7 | 1328 | | 14 8 38.260 |
| F8 | 1326 | | 14 26 33.030 |
| F8 | 1328 | | 14 26 33.213 |

REDUCTION PROCEDURES

B. PAYLOAD ENTRY AND EXIT DATA

Times of payload entry into and exit from the cloud are given as the times of the frames in which these events were observed to have taken place. They are given for all cameras possible and for multiple entries and exits when these occurred.

Height D of the payload at entry or exit was determined from film distance d of the payload above ground level, focal length F, and range R from camera to test site.

$$D = \frac{R \cdot d}{F} \quad (1)$$

PAYLOAD ENTRY AND EXIT DATA

| TEST | CAMERA STATION | TIME OF PAYLOAD ENTRY | | | TIME OF PAYLOAD EXIT | | | HT AT EXIT (M) | |
|------|-------------------|--------------------------|----|--------|-------------------------|----|---------------|----------------------|-------|
| | | HR | MN | SEC | HR | MN | SEC | | |
| A2 | 1328 | 13 | 18 | 52.233 | 30.0 | | 13 | 19 12.281 | 37.8 |
| A3 | 1326 | 13 | 29 | 18.605 | 21.4 | | 13 | 29 20.630 | 22.2 |
| A3 | 1328 | 13 | 29 | 11.041 | 26.0 | | 13 | 29 26.902 | 23.9 |
| A4 | 1326 | 13 | 40 | 10.558 | 20.3 | | 13 | 40 15.513 | 20.1 |
| A4 | 1328 | 13 | 40 | 17.898 | 17.0 | | 13 | 40 29.535 | 18.3 |
| B4 | 1327 | 13 | 41 | 44.173 | 49.2 | | 13 | 41 49.999 | 62.0 |
| B4 | 1328 | 13 | 41 | 34.620 | 48.2 | | 13 | 41 38.331 | 46.4 |
| B5 | 1327 | 13 | 51 | 50.034 | 34.3 | | 13 | 51 53.293 | 35.0 |
| B5 | 1327 | 13 | 52 | 20.456 | 84.7 | | NOT AVAILABLE | | |
| B5 | 1328 | 13 | 51 | 43.433 | 42.4 | | 13 | 52 2.788 | 45.1 |
| B6 | 1327 | 14 | 2 | 6.266 | 48.3 | | 14 | 2 11.395 | 66.3 |
| B7 | 1326 | 14 | 16 | 5.798 | 145.7 | | 14 | 16 9.244 | 144.7 |
| B7 | 1326 | 14 | 16 | 21.017 | 164.9 | | 14 | 16 33.362 | 192.6 |
| B7 | 1328 | 14 | 15 | 20.148 | 53.1 | | 14 | 15 43.981 | 71.7 |
| C1 | 1326 | 13 | 14 | 46.703 | 41.0 | | NOT AVAILABLE | | |
| C1 | 1328 | 13 | 14 | 16.896 | 65.4 | | 13 | 14 5.588 | 68.2 |
| C1 | 1328 | 13 | 18 | 21.803 | 23.2 | | NOT AVAILABLE | | |
| D1 | 1326 | 13 | 18 | 8.497 | 1.1 | | 13 | 18 40.271 | 30.3 |
| D1 | 1328 | 13 | 18 | 8.497 | 1.1 | | 13 | 18 39.298 | 29.2 |
| D2 | 1326 | 13 | 31 | 30.528 | 9.6 | | 13 | 31 41.838 | 5.3 |
| D2 | 1328 | 13 | 31 | 15.343 | 7.8 | | 13 | 31 37.238 | 9.0 |
| D3 | 1326 | 13 | 49 | 50.810 | 4.5 | | 13 | 50 8.843 | 6.1 |
| D4 | 1326 | 14 | 7 | 47.303 | 10.9 | | 14 | 8 7.130 | 5.2 |
| D4 | 1328 | 13 | 48 | 25.754 | 28.7 | | 14 | 8 42.417 | 27.1 |
| E1 | 1328 | | | | | | 13 | 48 29.268 | 30.8 |

PAYLOAD ENTRY AND EXIT DATA

| TEST | CAMERA STATION | TIME OF PAYLOAD ENTRY HR MN SEC | HT AT ENTRY (M) | TIME OF PAYLOAD EXIT HR MN SEC | HT AT EXIT (M) |
|------|----------------|------------------------------------|--------------------|-----------------------------------|-------------------|
| E2 | 1326 | 13 57 52.768 | 17.3 | 13 58 0.791 | 3.6 |
| E2 | 1328 | 13 57 42.641 | 25.6 | 13 58 6.048 | 5.1 |
| E3 | 1326 | 14 22 27.781 | 23.4 | 14 22 33.859 | 25.1 |
| E3 | 1328 | 14 22 17.401 | 32.9 | 14 22 25.689 | 25.0 |
| E4 | 1326 | 14 29 49.800 | 16.8 | 14 30 4.635 | 9.2 |
| E4 | 1328 | 14 29 36.659 | 36.3 | 14 30 0.729 | 11.0 |
| E5 | 1327 | 13 41 1.535 | 3.0 | NOT AVAILABLE | |
| E6 | 1327 | 13 57 14.588 | 8.3 | 13 57 26.041 | 10.1 |
| E7 | 1327 | 14 9 50.968 | 26.8 | 14 10 15.880 | 78.4 |
| E8 | 1327 | 14 25 11.535 | 10.2 | 14 25 21.219 | 18.4 |
| E9 | 1327 | 14 36 58.848 | 17.0 | 14 37 36.910 | 26.5 |
| E10 | 1327 | 14 47 4.240 | 23.4 | 14 47 45.795 | 76.0 |
| *12 | 1327 | NOT AVAILABLE | | 17 6 7.034 | 999.0 |
| 12 | 1328 | 17 5 49.519 | 8.9 | 17 5 52.438 | 7.7 |
| 13 | 1327 | NOT AVAILABLE | | 17 8 58.460 | 999.9 |
| 13 | 1328 | NOT AVAILABLE | | 17 9 1.848 | 18.4 |
| 14 | 1327 | NOT AVAILABLE | | 17 11 17.768 | 999.9 |
| 14 | 1328 | 17 11 19.814 | 7.1 | 17 11 24.090 | 11.9 |
| 15 | 1327 | 17 13 58.410 | 17.8 | 17 14 29.380 | 26.0 |
| 15 | 1328 | NOT AVAILABLE | | 17 14 11.844 | 999.9 |
| 15 | 1328 | 17 14 16.700 | 13.3 | 17 14 22.433 | 15.6 |
| 15 | 1328 | 17 17 1.879 | 7.1 | 17 17 14.778 | 52.9 |
| 16 | 1327 | 17 16 48.496 | 20.9 | NOT AVAILABLE | |
| 16 | 1328 | NOT AVAILABLE | | 17 20 19.945 | 54.1 |
| 17 | 1327 | NOT AVAILABLE | | 17 23 22.594 | 64.4 |
| 18 | 1327 | | | | |

*numbers 12 through 18, above, correspond to G-1 events.

PAYLOAD ENTRY AND EXIT DATA

| TEST | STATION | CAMERA | TIME OF PAYLOAD ENTRY HR MN SEC | HT AT ENTRY (M) | TIME OF PAYLOAD EXIT HR MN SEC | HT AT EXIT (M) |
|------|---------|--------|------------------------------------|--------------------|-----------------------------------|-------------------|
| *18 | 1328 | | 17 23 0.844 | 20.9 | 17 23 10.658 | 58.2 |
| 19 | 1327 | | NOT AVAILABLE | | 17 25 15.205 | 70.3 |
| 19 | 1328 | | NOT AVAILABLE | | 17 25 34.708 | 68.5 |
| 20 | 1327 | | NOT AVAILABLE | | 17 27 41.658 | 152.7 |
| 20 | 1328 | | 17 27 29.175 | 67.1 | NOT AVAILABLE | |
| 21 | 1327 | | NOT AVAILABLE | | 17 29 50.719 | 151.6 |
| 21 | 1328 | | NOT AVAILABLE | | 17 29 48.716 | 131.9 |
| F1 | 1326 | | 13 38 20.007 | 21.3 | 13 38 35.769 | 27.8 |
| F1 | 1328 | | 13 38 21.453 | 22.5 | 13 39 6.184 | 80.1 |
| F2 | 1326 | | 13 49 52.910 | 21.1 | 13 50 7.699 | 28.0 |
| F2 | 1328 | | 13 49 45.556 | 28.7 | NOT AVAILABLE | |
| F3 | 1328 | | 14 7 26.694 | 22.0 | NOT AVAILABLE | |
| F4 | 1326 | | 14 24 54.880 | 30.5 | NOT AVAILABLE | |
| F4 | 1328 | | 14 24 42.390 | 28.0 | NOT AVAILABLE | |
| F5 | 1328 | | 13 39 52.438 | 21.9 | NOT AVAILABLE | |
| F6 | 1326 | | 13 55 46.955 | 18.4 | 13 56 3.699 | 25.2 |
| F6 | 1328 | | 13 55 32.436 | 85.0 | NOT AVAILABLE | |
| F7 | 1328 | | 14 9 56.766 | 17.0 | NOT AVAILABLE | |
| F8 | 1326 | | 14 28 1.046 | 12.2 | 14 28 5.988 | 14.9 |
| F8 | 1328 | | 14 27 43.290 | 18.9 | NOT AVAILABLE | |

*numbers 18 through 21, above, correspond to G-1 events.

REDUCTION PROCEDURES

C. DUST CLOUD DATA

Explosive events used to create dust clouds in the test area are listed in Table 2.1 as events: A (1-4); B (1-8); C (1-2); D (1-4); E (1-10); and, F (1-8).

The A and B events and some of the E events utilized three charges; when the three ensuing clouds could be distinguished on film they were measured at approximately 0.1-second intervals (every frame) and reduced individually as clouds C1, C2, and C3 of the developing cloud. Gradually, these individual clouds formed a merged cloud. In some other tests, a merged cloud was the only kind discernible.

F event clouds that were measured and reduced were clouds caused by the impact of a single shell separated from cluster bursts. Merged clouds and isolated bursts were measured at approximately 5-second (50 frame) intervals. Clouds for D and F events were also measured at single-frame intervals for the first 3-second coverage from camera station E-1328.

REDUCTION PROCEDURES

C. DUST CLOUD DATA, CONT'D

Cloud images were measured according to the scheme illustrated in Fig. I. The coordinate system origin is at the center of the test array; the x-axis is horizontal at ground level, and the y-axis is vertical.

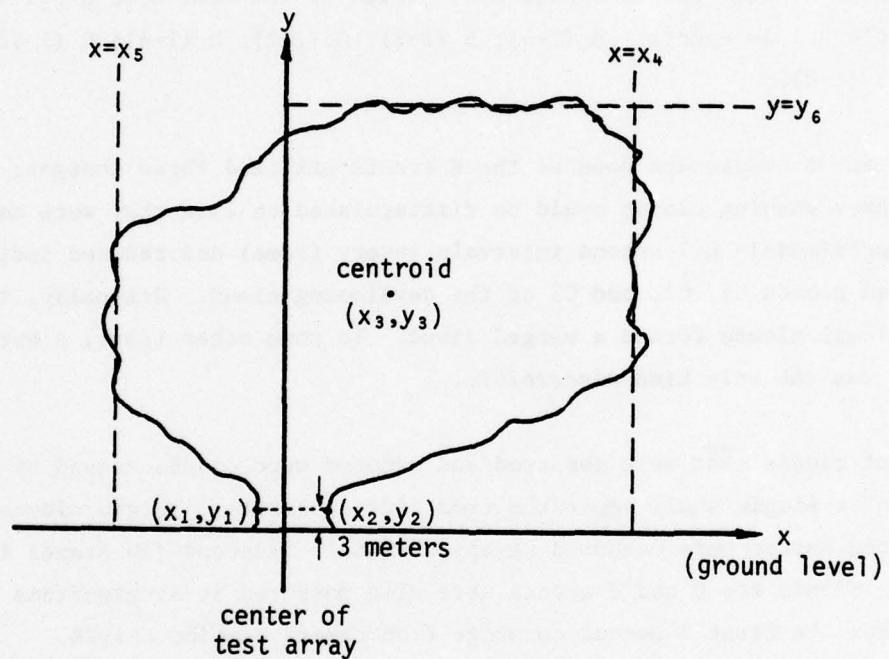


FIG. I. CLOUD MEASUREMENT SCHEME

The stem edges were measured 3 meters above ground level (x_1, y_1) and (x_2, y_2) . The centroid location was estimated and recorded as (x_3, y_3) . Left and right edges of the cloud were estimated to yield x_5 and x_4 , and the top of the cloud was similarly estimated to yield y_6 . The irregular shape and indistinct edges of the cloud preclude exact measurements; measurements are necessarily functions of the judgment of the film reader.

REDUCTION PROCEDURES

C. DUST CLOUD DATA, CONT'D

All cloud data were derived by converting film distances to object distances according to Eq. (1) as follows.

| <u>Object Distance D</u> | <u>Film Distance d</u> |
|--------------------------|------------------------|
| stem width | $(x_2 - x_1)$ |
| cloud width | $(x_4 - x_5)$ |
| height at top of cloud | y_6 |
| cloud centroid | x_3, y_3 |
| stem edge, left | x_1 |
| stem edge, right | x_2 |

Stem edges (at 3 meters above ground level) are not given for developing clouds.

Non-perpendicularity of line-of-sight to test layout results in some distortion of data derived by conversion of film distance to spatial distance by application of a simple scale factor. No corrections for this aspect distortion have been applied. Another factor which introduces some error in the scale factor and therefore in the reduced data is cloud drift in the optical axis direction. No modifications for drift correction have been made to data in this report.

TABLE III
DETAILED INDEX OF CLOUD GROWTH DATA

| Date (Oct 1978) | Mission Code | Event (Test) | Camera Station | CLOUD GROWTH DATA | Page |
|-----------------------|-----------------|-----------------|-------------------|--------------------------------|------|
| 2 | AB | A-1 | | not available | |
| | | A-2 | 1328 | developing cloud | C 2 |
| | | A-2 | 1328 | merged cloud | C 3 |
| | | A-3 | 1326 | developing cloud | C 4 |
| | | A-3 | 1326 | merged cloud | C 5 |
| | | A-3 | 1328 | developing cloud | C 6 |
| | | A-3 | 1328 | merged cloud | C 7 |
| | | A-4 | 1326 | developing cloud | C 8 |
| | | A-4 | 1326 | merged cloud | C 9 |
| | | A-4 | 1328 | developing cloud | C 10 |
| | | A-4 | 1328 | merged cloud | C 11 |
| 3 | FB | B-1 | 1328 | developing cloud | C 12 |
| | | B-1 | 1328 | merged cloud | C 13 |
| | | B-2 | 1327 | developing cloud not available | |
| | | B-2 | 1327 | merged cloud | C 14 |
| | | B-2 | 1328 | developing cloud | C 16 |
| | | B-2 | 1328 | merged cloud | C 18 |
| | | B-3 | 1327 | developing cloud | C 19 |
| | | B-3 | 1327 | merged cloud | C 20 |
| | | B-3 | 1328 | developing cloud | C 22 |
| | | B-3 | 1328 | merged cloud | C 23 |
| | | B-4 | 1327 | developing cloud not available | |
| | | B-4 | 1327 | merged cloud | C 24 |
| | | B-4 | 1328 | developing cloud | C 26 |
| | | B-4 | 1328 | merged cloud | C 27 |
| | | B-5 | 1327 | developing cloud | C 28 |
| | | B-5 | 1327 | merged cloud | C 29 |
| | | B-5 | 1328 | developing cloud | C 31 |
| | | B-5 | 1328 | merged cloud | C 32 |
| | | B-6 | 1327 | developing cloud | C 33 |
| | | B-6 | 1327 | merged cloud | C 34 |
| | | B-6 | 1328 | developing cloud | C 36 |
| | | B-6 | 1328 | merged cloud | C 37 |

TABLE III, CONT'D
DETAILED INDEX OF CLOUD GROWTH DATA

| Date (Oct 1978) | Mission Code | Event (Test) | Camera Station | CLOUD GROWTH DATA | Page |
|-----------------------|-----------------|-----------------|-------------------|--------------------------------|------|
| 3 | FB | B-7 | 1326 | developing cloud | C 38 |
| | | B-7 | 1326 | merged cloud | C 39 |
| | | B-7 | 1328 | developing cloud | C 40 |
| | | B-7 | 1328 | merged cloud | C 41 |
| | | B-8 | | not available | |
| 5 | FB | C-1 | 1326 | developing cloud not available | |
| | | C-1 | 1326 | merged cloud | C 42 |
| | | C-1 | 1328 | developing cloud not available | |
| | | C-1 | 1328 | merged cloud | C 43 |
| 10 | FB | C-2 | 1326 | developing cloud not available | |
| | | C-2 | 1326 | merged cloud | C 44 |
| | | C-2 | 1327 | developing cloud not available | |
| | | C-2 | 1327 | merged cloud | C 45 |
| 6 | AA | D-1 | 1326 | developing cloud not available | |
| | | D-1 | 1326 | merged cloud | C 46 |
| | | D-1 | 1328 | developing cloud not available | |
| | | D-1 | 1328 | merged cloud | C 47 |
| | | D-2 | 1326 | developing cloud not available | |
| | | D-2 | 1326 | merged cloud | C 49 |
| | | D-2 | 1328 | developing cloud not available | |
| | | D-2 | 1328 | merged cloud | C 50 |
| | | D-3 | 1326 | developing cloud not available | |
| | | D-3 | 1326 | merged cloud | C 52 |
| | | D-3 | 1328 | developing cloud not available | |
| | | D-3 | 1328 | merged cloud | C 53 |
| | | D-4 | 1326 | developing cloud not available | |
| | | D-4 | 1326 | merged cloud | C 55 |
| | | D-4 | 1328 | developing cloud not available | |
| | | D-4 | 1328 | merged cloud | C 56 |
| 11 | FB | E-1 | 1326 | developing cloud | C 58 |
| | | E-1 | 1326 | merged cloud | C 59 |
| | | E-1 | 1328 | developing cloud | C 60 |
| | | E-1 | 1328 | merged cloud | C 62 |

TABLE III, CONT'D
DETAILED INDEX OF CLOUD GROWTH DATA

| Date (Oct 1978) | Mission Code | Event (Test) | Camera Station | CLOUD GROWTH DATA | Page |
|-----------------------|-----------------|-----------------|--------------------------------|--------------------------------|------|
| 11 | FB | E-2 | 1326 | developing cloud | C 63 |
| | | E-2 | 1326 | merged cloud | C 64 |
| | | E-2 | 1328 | developing cloud | C 65 |
| | | E-2 | 1328 | merged cloud | C 66 |
| | E-3 | 1326 | developing cloud not available | | |
| | | 1326 | merged cloud | C 67 | |
| | | 1328 | developing cloud not available | | |
| | | 1328 | merged cloud | C 68 | |
| | E-4 | 1326 | developing cloud not available | | |
| | | 1326 | merged cloud | C 69 | |
| | | 1328 | developing cloud not available | | |
| | | 1328 | merged cloud | C 70 | |
| 14 | AA | E-5 | | not available | |
| | | E-6 | 1327 | developing cloud not available | |
| | | E-6 | 1327 | merged cloud | C 71 |
| | | E-7 | 1327 | developing cloud not available | |
| | | E-7 | 1327 | merged cloud | C 72 |
| | | E-8 | 1327 | developing cloud | C 73 |
| | | E-8 | 1327 | merged cloud | C 74 |
| | | E-9 | 1327 | developing cloud | C 75 |
| | | E-9 | 1327 | merged cloud | C 76 |
| | | E-10 | 1327 | developing cloud | C 77 |
| | | E-10 | 1327 | merged cloud | C 78 |
| 12 | AB | F-1 | 1328 | isolated burst | C 79 |
| | | F-2 | 1328 | isolated burst | C 81 |
| | | F-3 | | not available | |
| | | F-4 | 1326 | isolated burst | C 83 |

TABLE III, CONT'D
DETAILED INDEX OF CLOUD GROWTH DATA

| Date (Oct 1978) | Mission Code | Event (Test) | Camera Station | CLOUD GROWTH DATA | Page |
|-----------------------|-----------------|-----------------|-------------------|--------------------------|------|
| 13 | FB | F-5 | | not available | |
| | | F-6 | | not available | |
| | | F-7 | | not available | |
| | | F-8 | 1326 | isolated burst | C 84 |

Note: data not available indicate one of the following conditions for each observing camera:

1. the event of interest was not shown on the photographic record;
2. the film was overexposed or underexposed and could not be measured;
3. timing could not be determined.

DIRT MISSION CODE AB
TEST A2, 2 OCT 1978
CAMERA STATION 1328
DEVELOPING CLOUD

PAGE C 2

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) |
|---------------|-------------------|--------------------|------------------------|-------------------------|-------------------------|
| 0.0 | 7.8 | 9.8 | 11.9 | -16.6 | 5.1 |
| 0.0 | 10.0 | 8.9 | 12.9 | 0.6 | 6.1 |
| 0.0 | 7.1 | 8.4 | 14.3 | 13.2 | 6.4 |
| 0.098 | 9.4 | 10.3 | 13.4 | -16.4 | 6.6 |
| 0.098 | 11.2 | 10.9 | 15.4 | -0.9 | 6.6 |
| 0.098 | 10.5 | 10.5 | 16.5 | 12.5 | 7.5 |
| 0.098 | 8.9 | 15.0 | 15.8 | -17.1 | 7.9 |
| 0.196 | 10.8 | 12.6 | 16.9 | -1.3 | 8.3 |
| 0.196 | 11.0 | 12.1 | 17.5 | 12.9 | 8.4 |
| 0.196 | 11.7 | 11.1 | 19.1 | -17.1 | 9.8 |
| 0.294 | 9.8 | 13.4 | 18.3 | -1.6 | 9.3 |
| 0.294 | 11.7 | 12.3 | 18.8 | 12.4 | 9.6 |
| 0.392 | 11.7 | 10.9 | 21.3 | -17.3 | 12.8 |
| 0.392 | 12.1 | 11.8 | 20.3 | -1.0 | 11.0 |
| 0.392 | 10.9 | 12.5 | 19.8 | 12.8 | 11.0 |
| 0.491 | 13.4 | 13.2 | 23.9 | -17.1 | 15.5 |
| 0.491 | 11.8 | 15.9 | 21.0 | -0.8 | 11.1 |
| 0.491 | 12.3 | 12.7 | 22.0 | 11.9 | 12.8 |
| 0.589 | 12.6 | 13.7 | 25.1 | -17.8 | 14.8 |
| 0.589 | 13.6 | 13.3 | 21.7 | -1.1 | 12.5 |
| 0.589 | 15.8 | 12.5 | 23.0 | 12.1 | 15.1 |
| 0.687 | 10.3 | 12.3 | 26.1 | -18.0 | 17.2 |
| 0.687 | 12.3 | 14.2 | 21.8 | -1.0 | 13.4 |
| 0.687 | 14.3 | 12.4 | 24.2 | 11.8 | 13.9 |
| 0.785 | 16.9 | 12.4 | 27.0 | -18.2 | 18.5 |
| 0.785 | 12.8 | 14.2 | 23.1 | -0.2 | 14.6 |
| 0.785 | 11.6 | 13.2 | 24.8 | 11.6 | 17.3 |
| 0.883 | 13.4 | 12.5 | 28.0 | -17.8 | 20.0 |
| 0.883 | 12.4 | 13.2 | 23.3 | 0.1 | 16.3 |
| 0.883 | 10.8 | 14.3 | 25.5 | 12.9 | 19.4 |

DIRT MISSION CODE AB
 TEST A2, 2 OCT 1978
 CAMERA STATION 1328
 MERGED CLOUD

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID | | LEFT (M) | EDGE RT (M) |
|---------------|----------------------|-----------------------|------------------------|----------------|-------|----------|----------------|
| | | | | X (M) | Z (M) | | |
| 0.982 | 40.1 | 44.6 | 26.3 | -0.8 | 17.4 | -23.2 | 17.0 |
| 5.890 | 62.0 | 50.3 | 43.2 | -11.3 | 25.0 | -27.4 | 34.6 |
| 10.798 | 62.9 | 52.7 | 52.7 | -18.3 | 34.3 | -34.0 | 28.9 |
| 15.707 | 70.6 | 53.6 | 59.2 | -18.1 | 43.0 | -43.3 | 27.3 |
| 20.615 | 73.6 | 55.0 | 65.7 | -23.5 | 48.2 | -48.6 | 25.0 |
| 25.523 | 68.1 | 59.3 | 68.8 | -24.4 | 51.3 | -56.8 | 11.3 |
| 30.431 | 66.8 | 63.2 | 73.0 | -24.2 | 53.5 | -62.3 | 4.6 |
| 35.340 | 69.1 | 65.3 | 75.0 | -25.3 | 56.8 | -67.4 | 1.7 |
| 40.248 | 71.2 | 72.6 | 76.1 | -24.2 | 59.9 | -72.8 | -1.6 |
| 45.156 | 72.5 | 74.3 | 82.9 | -23.9 | 65.1 | -77.0 | -4.5 |
| 50.065 | 71.4 | 79.5 | 85.0 | -22.7 | 65.9 | -80.9 | -9.5 |
| 54.973 | 66.0 | 64.8 | 94.2 | -24.4 | 64.8 | -80.9 | -14.9 |
| 59.881 | 70.6 | 71.1 | 95.4 | -18.8 | 69.8 | -89.3 | -18.8 |
| 64.790 | 59.2 | 84.4 | 95.7 | -16.8 | 68.7 | -84.0 | -24.8 |

DIRT MISSION CODE AB
TEST A3, 2 OCT 1978
CAMERA STATION 1326
DEVELOPING CLOUD

PAGE C 4

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT TOP (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) |
|---------------|----------------------|-----------------------|--------------------|------------------------|-------------------------|-------------------------|
| 0.0 | C1 C2 C3 | 9.3 10.8 6.3 | 8.3 10.3 7.4 | 8.1 7.8 8.6 | -10.7 0.4 11.8 | 4.5 3.9 4.5 |

DIRT MISSION CODE AB
 TEST A3, 2 OCT 1978
 CAMERA STATION 1326
 MERGED CLOUD

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID | | | STEM LEFT (M) | STEM RIGHT (M) |
|---------------|----------------------|-----------------------|------------------------|----------------|-------|-------|------------------|-------------------|
| | | | | X (M) | Y (M) | Z (M) | | |
| 0.072 | 31.5 | 32.2 | 12.7 | 0.3 | 6.5 | -16.2 | 15.3 | |
| 3.676 | 55.1 | 44.7 | 43.4 | 16.9 | 30.5 | -11.7 | 43.4 | |
| 7.279 | 60.8 | 48.3 | 52.4 | 32.8 | 37.9 | -8.3 | 52.4 | |
| 10.883 | 62.3 | 48.4 | 55.8 | 49.2 | 42.4 | -2.8 | 59.5 | |
| 14.486 | 64.4 | 57.9 | 63.7 | 66.3 | 47.6 | 2.6 | 67.0 | |
| 18.090 | 62.1 | 59.6 | 69.5 | 82.1 | 51.9 | 6.9 | 69.0 | |
| 21.693 | 70.6 | 64.3 | 75.6 | 100.9 | 56.7 | 9.6 | 80.2 | |
| 25.297 | 74.1 | 66.1 | 81.4 | 118.7 | 60.2 | 19.8 | 94.0 | |
| 28.900 | 75.6 | 67.9 | 83.8 | 137.0 | 61.9 | 25.9 | 101.5 | |
| 32.504 | 74.5 | 67.7 | 88.3 | 155.1 | 63.2 | 40.4 | 114.9 | |
| 36.107 | 82.8 | 65.9 | 91.3 | 174.4 | 66.2 | 43.7 | 126.6 | |
| 39.711 | 77.7 | 70.6 | 96.3 | 192.4 | 69.5 | 56.0 | 133.7 | |
| 43.314 | 80.0 | 54.4 | 95.4 | 215.8 | 72.0 | 58.6 | 138.7 | |

DIRT MISSION CODE AB
 TEST A3, 2 OCT 1978
 CAMERA STATION 1328
 DEVELOPING CLOUD

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID | | |
|---------------|-------------------|--------------------|------------------------|----------------|-------|-------|
| | | | | X (M) | Y (M) | Z (M) |
| 0.0 | C1 | 6.0 | 5.8 | 7.1 | -13.4 | 3.8 |
| 0.0 | C2 | 6.9 | 6.9 | 6.6 | 0.3 | 3.3 |
| 0.0 | C3 | 7.9 | 7.8 | 7.8 | 13.7 | 4.4 |
| 0.098 | C1 | 8.5 | 12.1 | 15.0 | -13.7 | 7.1 |
| 0.098 | C2 | 10.3 | 13.1 | 15.3 | 0.8 | 7.1 |
| 0.098 | C3 | 8.3 | 13.9 | 18.3 | 14.5 | 9.6 |
| 0.196 | C1 | 8.6 | 12.2 | 16.8 | -14.8 | 8.7 |
| 0.196 | C2 | 10.9 | 12.3 | 17.8 | 0.0 | 7.8 |
| 0.196 | C3 | 9.4 | 12.4 | 21.3 | 14.3 | 11.2 |
| 0.294 | C1 | 9.9 | 13.2 | 17.7 | -14.7 | 9.9 |
| 0.294 | C2 | 11.4 | 12.3 | 18.6 | 0.0 | 8.2 |
| 0.294 | C3 | 9.8 | 12.8 | 23.1 | 13.8 | 14.4 |
| 0.392 | C1 | 11.8 | 14.6 | 19.9 | -15.3 | 10.4 |
| 0.392 | C2 | 9.8 | 13.1 | 20.4 | -0.3 | 10.7 |
| 0.392 | C3 | 14.0 | 14.9 | 24.6 | 13.4 | 14.5 |
| 0.491 | C1 | 10.7 | 14.4 | 22.4 | -15.4 | 12.4 |
| 0.491 | C2 | 11.2 | 13.3 | 21.7 | 0.3 | 10.7 |
| 0.491 | C3 | 14.2 | 14.3 | 26.0 | 13.5 | 15.6 |
| 0.589 | C1 | 12.6 | 12.7 | 25.0 | -16.5 | 16.2 |
| 0.589 | C2 | 10.5 | 10.8 | 21.9 | -1.2 | 13.9 |
| 0.589 | C3 | 11.8 | 14.7 | 27.0 | 13.2 | 17.5 |
| 0.687 | C1 | 11.3 | 12.5 | 26.3 | -16.3 | 16.5 |
| 0.687 | C2 | 8.9 | 10.6 | 22.3 | -1.1 | 15.5 |
| 0.687 | C3 | 12.9 | 15.5 | 27.8 | 13.0 | 18.3 |
| 0.785 | C1 | 9.9 | 13.6 | 28.5 | -16.9 | 17.5 |
| 0.785 | C2 | 10.4 | 10.4 | 23.2 | -1.0 | 16.1 |
| 0.785 | C3 | 13.1 | 15.3 | 29.2 | 13.5 | 20.3 |
| 0.883 | C1 | 11.5 | 14.3 | 28.8 | -16.9 | 17.9 |
| 0.883 | C2 | 11.3 | 12.5 | 25.4 | 0.0 | 16.6 |
| 0.883 | C3 | 13.8 | 16.1 | 29.7 | 14.2 | 19.8 |

DIRT MISSION CONDE AB
 TEST A3, 2 OCT 1978
 CAMERA STATION 1328
 MERGED CLOUD

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) | STEM LEFT (M) | EDGE LEFT (M) | STEM RT (M) |
|---------------|-------------------|--------------------|------------------------|-------------------------|-------------------------|---------------|---------------|-------------|
| 0.979 | 37.1 | 46.0 | 29.5 | -1.0 | 17.0 | -17.3 | 19.8 | |
| 5.874 | 50.0 | 67.6 | 56.8 | -6.7 | 38.8 | -17.3 | 32.7 | |
| 10.768 | 47.7 | 78.7 | 70.5 | -14.5 | 47.4 | -24.3 | 23.4 | |
| 15.663 | 49.7 | 83.6 | 85.2 | -18.2 | 52.3 | -31.2 | 18.5 | |
| 20.558 | 51.5 | 85.5 | 89.0 | -19.5 | 57.4 | -36.5 | 15.0 | |
| 25.452 | 53.8 | 84.7 | 93.4 | -22.2 | 62.5 | -45.4 | 8.4 | |
| 30.347 | 55.5 | 86.6 | 98.2 | -20.4 | 68.3 | -49.4 | 6.1 | |
| 35.242 | 59.0 | 83.8 | 97.8 | -19.9 | 72.7 | -57.3 | 1.7 | |
| 40.136 | 64.3 | 86.7 | 104.3 | -17.5 | 72.4 | -65.7 | -1.4 | |
| 45.031 | 62.6 | 92.3 | 109.6 | -13.1 | 77.3 | -67.1 | -4.5 | |
| 49.926 | 65.3 | 101.6 | 112.7 | -9.8 | 78.9 | -75.0 | -9.7 | |
| 54.820 | 64.6 | 109.2 | 114.7 | 5.7 | 83.6 | -78.7 | -14.1 | |
| 59.715 | 68.0 | 111.6 | 116.7 | 3.7 | 85.9 | -89.3 | -21.4 | |
| 64.610 | 73.8 | 117.9 | 117.0 | 5.6 | 85.7 | -93.8 | -20.0 | |
| 69.504 | 71.2 | 125.3 | 115.3 | 2.8 | 80.1 | -96.4 | -25.2 | |
| 74.399 | 75.5 | 118.6 | 114.8 | 6.3 | 82.1 | -107.1 | -31.6 | |
| 79.294 | 82.3 | 96.0 | 116.7 | 32.2 | 92.9 | -117.5 | -35.2 | |

DIRT MISSION CODE AB
TEST A4, 2 OCT 1978
CAMERA STATION 1326
DEVELOPING CLOUD

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | HT AT CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) |
|---------------|-------------------------|-----------------------|------------------------|----------------------------------|----------------------------|
| 0.0 | C1 0.0 0.0 0.0 | 7.8 9.0 7.7 | 8.0 10.0 7.5 | 14.1 11.3 13.6 | -10.6 -1.7 9.6 |

CLOUD
CENTROID
X (M)

Z (M)

DIRT MISSION CODE AB
 TEST A4, 2 OCT 1978
 CAMERA STATION 1326
 MERGED CLOUD

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID | | STEM LEFT (M) | EDGE RT (M) |
|---------------|----------------------|-----------------------|------------------------|----------------|-------|------------------|----------------|
| | | | | X (M) | Z (M) | | |
| 0.144 | 33.1 | 35.1 | 15.7 | -1.8 | 7.5 | -17.2 | 15.9 |
| 3.737 | 48.7 | 47.4 | 43.4 | 12.0 | 22.5 | -10.0 | 38.7 |
| 7.330 | 54.6 | 41.8 | 52.1 | 30.7 | 30.6 | -8.7 | 45.9 |
| 10.923 | 59.1 | 50.7 | 60.0 | 50.5 | 47.0 | -4.1 | 55.1 |
| 14.516 | 69.4 | 52.6 | 64.1 | 68.5 | 51.8 | 2.3 | 71.7 |
| 18.109 | 70.7 | 49.5 | 70.2 | 88.3 | 57.7 | 8.3 | 79.1 |
| 21.702 | 43.8 | 42.6 | 79.4 | 105.3 | 62.8 | 30.1 | 73.9 |
| 25.295 | 60.4 | 50.8 | 84.7 | 126.4 | 68.1 | 31.2 | 91.5 |
| 28.889 | 51.6 | 50.1 | 89.6 | 144.9 | 71.9 | 41.4 | 93.0 |
| 32.482 | 65.5 | 55.4 | 91.1 | 167.1 | 76.1 | 46.1 | 111.6 |
| 36.075 | 80.5 | 61.8 | 94.3 | 187.5 | 77.5 | 52.1 | 132.6 |

DIRT MISSION CODE AB
 TEST A4, 2 OCT 1978
 CAMERA STATION 1328
 DEVELOPING CLOUD

PAGE C 10

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID | | |
|---------------|-------------------|--------------------|------------------------|----------------|-------|------|
| | | | | X (M) | Z (M) | |
| 0.0 | C1 | 7.6 | 10.6 | 13.5 | -14.7 | 6.6 |
| 0.0 | C2 | 8.1 | 8.3 | 11.6 | -0.7 | 6.0 |
| 0.0 | C3 | 9.9 | 9.1 | 13.1 | 14.4 | 7.2 |
| 0.098 | C1 | 10.8 | 14.2 | 16.6 | -15.1 | 7.4 |
| 0.098 | C2 | 7.2 | 10.2 | 16.9 | -0.5 | 7.4 |
| 0.098 | C3 | 10.3 | 10.3 | 17.5 | 13.6 | 8.4 |
| 0.196 | C1 | 11.8 | 14.8 | 18.5 | -16.9 | 10.0 |
| 0.196 | C2 | 10.7 | 17.3 | 17.3 | -1.0 | 10.4 |
| 0.196 | C3 | 7.4 | 12.5 | 19.6 | 13.3 | 9.5 |
| 0.294 | C1 | 6.5 | 14.9 | 19.2 | -15.8 | 10.3 |
| 0.294 | C2 | 8.3 | 18.4 | 18.9 | -0.8 | 9.8 |
| 0.294 | C3 | 8.4 | 12.0 | 19.3 | 13.3 | 10.6 |
| 0.392 | C1 | 6.2 | 14.3 | 20.2 | -17.3 | 10.1 |
| 0.392 | C2 | 6.3 | 18.8 | 19.3 | -4.0 | 9.1 |
| 0.392 | C3 | 9.5 | 11.9 | 20.9 | 12.8 | 10.0 |
| 0.490 | C1 | 7.1 | 13.2 | 23.0 | -17.7 | 10.5 |
| 0.490 | C2 | 6.4 | 14.4 | 21.4 | -2.4 | 11.5 |
| 0.490 | C3 | 8.2 | 12.2 | 22.9 | 12.2 | 11.5 |
| 0.588 | C1 | 8.4 | 14.6 | 23.6 | -16.6 | 11.1 |
| 0.588 | C2 | 8.8 | 15.9 | 21.5 | -2.7 | 11.4 |
| 0.588 | C3 | 11.0 | 12.4 | 24.7 | 11.6 | 12.7 |
| 0.686 | C1 | 10.1 | 14.3 | 25.8 | -15.5 | 15.7 |
| 0.686 | C2 | 9.9 | 14.6 | 22.3 | -3.0 | 12.3 |
| 0.686 | C3 | 13.6 | 11.6 | 26.4 | 12.8 | 16.6 |
| 0.784 | C1 | 10.6 | 15.2 | 26.9 | -15.2 | 16.9 |
| 0.784 | C2 | 12.3 | 16.3 | 24.0 | -3.1 | 14.5 |
| 0.784 | C3 | 13.4 | 14.3 | 27.2 | 13.1 | 18.4 |
| 0.882 | C1 | 10.8 | 14.4 | 28.8 | -16.2 | 16.1 |
| 0.882 | C2 | 11.7 | 15.3 | 23.8 | -3.7 | 13.3 |
| 0.882 | C3 | 18.7 | 16.2 | 28.6 | 11.8 | 17.3 |

DIRT MISSION CODE AB
 TEST A4, 2 OCT 1978
 CAMERA STATION 1328
 MERGED CLOUD

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | CLOUD CENTROID | | | STEM LEFT (M) | EDGE RT (M) |
|---------------|----------------------|-----------------------|------------------------|-------|-------|------------------|----------------|
| | | | HT AT CLOUD TOP (M) | X (M) | Z (M) | | |
| 0.978 | 43.6 | 45.1 | 28.0 | -2.1 | 14.7 | -20.3 | 23.3 |
| 5.870 | 61.0 | 56.7 | 50.7 | -7.5 | 33.8 | -27.4 | 33.7 |
| 10.762 | 58.7 | 60.4 | 60.2 | -18.4 | 42.6 | -31.5 | 27.2 |
| 15.653 | 60.8 | 64.9 | 67.5 | -22.0 | 49.3 | -37.1 | 23.6 |
| 20.545 | 59.7 | 70.6 | 74.7 | -26.9 | 58.0 | -44.4 | 15.3 |
| 25.436 | 79.2 | 67.7 | 80.7 | -26.2 | 60.9 | -59.4 | 19.8 |
| 30.328 | 72.1 | 71.4 | 86.7 | -28.4 | 63.3 | -59.9 | 12.2 |
| 35.219 | 59.3 | 76.1 | 95.4 | -20.5 | 74.3 | -63.9 | -4.6 |
| 40.111 | 58.1 | 77.2 | 100.1 | -20.4 | 78.0 | -65.9 | -7.8 |
| 45.003 | 59.9 | 81.2 | 107.7 | -15.7 | 78.9 | -72.7 | -12.8 |
| 49.894 | 66.5 | 59.7 | 115.1 | -7.0 | 85.8 | -81.7 | -15.2 |
| 54.786 | 61.5 | 59.1 | 121.1 | -2.6 | 91.1 | -84.7 | -23.2 |
| 59.677 | 71.7 | 78.1 | 123.8 | 6.5 | 96.2 | -92.5 | -20.8 |
| 64.569 | 63.1 | 89.2 | 127.4 | 20.3 | 101.8 | -88.7 | -25.6 |
| 69.461 | 62.2 | 89.1 | 130.5 | 29.7 | 102.1 | -96.9 | -34.8 |
| 74.352 | 64.2 | 99.2 | 133.9 | 39.1 | 105.1 | -101.3 | -37.1 |
| 79.244 | 62.0 | 109.3 | 130.9 | 45.6 | 102.8 | -100.3 | -38.3 |

DIRT MISSION CODE FB
 TEST B1, 3 OCT 1978
 CAMERA STATION 1328
 DEVELOPING CLOUD

PAGE C 12

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) |
|---------------|-------------------|--------------------|------------------------|-------------------------|-------------------------|
| 0.0 | C1 | 11.1 | 10.9 | 8.1 | -15.3 |
| 0.0 | C2 | 7.8 | 7.6 | 7.0 | -0.2 |
| 0.0 | C3 | 4.4 | 5.6 | 5.7 | 4.0 |
| 0.098 | C1 | 11.1 | 10.4 | 9.1 | 13.7 |
| 0.098 | C2 | 7.7 | 9.3 | 7.8 | -14.3 |
| 0.098 | C3 | 7.4 | 8.0 | 6.7 | -0.5 |
| 0.196 | C1 | 9.4 | 10.2 | 11.0 | 14.0 |
| 0.196 | C2 | 10.7 | 11.0 | 14.2 | -14.6 |
| 0.196 | C3 | 10.3 | 12.0 | 11.8 | 0.1 |
| 0.294 | C1 | 7.8 | 12.9 | 12.1 | -16.1 |
| 0.294 | C2 | 10.6 | 10.4 | 14.7 | -0.3 |
| 0.294 | C3 | 9.5 | 8.9 | 14.1 | 7.4 |
| 0.392 | C1 | 10.5 | 11.8 | 13.4 | 14.2 |
| 0.392 | C2 | 8.3 | 12.0 | 15.8 | -14.6 |
| 0.392 | C3 | 9.7 | 14.3 | 14.1 | 6.9 |
| 0.490 | C1 | 10.5 | 10.0 | 15.8 | -14.6 |
| 0.490 | C2 | 8.9 | 12.0 | 17.6 | -0.2 |
| 0.490 | C3 | 10.9 | 15.0 | 17.9 | -0.4 |
| 0.588 | C1 | 10.9 | 12.2 | 19.1 | 14.2 |
| 0.588 | C2 | 10.6 | 12.8 | 19.1 | -15.9 |
| 0.588 | C3 | 10.5 | 14.3 | 20.3 | 10.0 |
| 0.686 | C1 | 11.2 | 14.8 | 16.7 | -17.2 |
| 0.686 | C2 | 8.0 | 12.1 | 20.9 | -0.7 |
| 0.686 | C3 | 10.6 | 12.8 | 19.1 | 11.4 |
| 0.784 | C1 | 11.6 | 13.1 | 18.0 | -13.5 |
| 0.784 | C2 | 10.3 | 13.2 | 22.6 | -15.2 |
| 0.784 | C3 | 10.0 | 16.2 | 23.3 | -0.8 |
| 0.882 | C1 | 8.3 | 11.0 | 19.8 | -15.8 |
| 0.882 | C2 | 10.1 | 12.3 | 23.2 | -1.2 |
| 0.882 | C3 | 10.4 | 16.2 | 23.5 | 14.1 |

DIRT MISSION CODE FB
 TEST 81, 3 OCT 1978
 CAMERA STATION 1328
 MERGED CLOUD

PAGE C 13

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) | LEFT (M) | STEM EDGE RT (M) | STEM EDGE RT (M) |
|---------------|-------------------|--------------------|------------------------|-------------------------|-------------------------|----------|---------------------|---------------------|
| 0. 980 | 42.8 | 45.9 | 25.2 | -1.1 | 12.6 | -22.7 | 20.1 | |
| 5.980 | 56.3 | 51.1 | 45.8 | -4.7 | 27.3 | -21.8 | 34.5 | |
| 10.781 | 57.8 | 49.0 | 56.5 | -8.6 | 37.2 | -29.4 | 28.3 | |
| 15.681 | 52.3 | 53.3 | 66.9 | -11.4 | 45.8 | -27.5 | 24.8 | |
| 20.581 | 55.4 | 52.5 | 74.3 | -12.5 | 51.8 | -38.1 | 17.3 | |
| 25.482 | 51.2 | 65.1 | 82.5 | -8.5 | 60.7 | -39.6 | 11.6 | |
| 30.382 | 49.8 | 71.6 | 87.6 | -9.9 | 69.3 | -43.1 | 6.7 | |
| 35.283 | 54.3 | 75.0 | 93.6 | -11.3 | 70.0 | -50.0 | 4.3 | |
| 40.183 | 57.8 | 83.8 | 104.1 | -5.9 | 75.4 | -55.3 | 2.4 | |
| 45.083 | 57.5 | 95.8 | 106.5 | -4.2 | 77.3 | -59.3 | -1.8 | |
| 49.984 | 49.3 | 101.3 | 118.3 | 0.7 | 81.6 | -55.2 | -5.9 | |
| 54.884 | 53.8 | 107.3 | 122.9 | 10.5 | 82.8 | -63.4 | -9.6 | |
| 59.784 | 48.6 | 119.8 | 126.6 | 12.1 | 83.8 | -65.6 | -17.1 | |
| 64.685 | 46.0 | 133.1 | 131.5 | 14.5 | 87.0 | -67.1 | -21.1 | |
| 69.585 | 40.1 | 131.1 | 129.9 | 17.2 | 87.0 | -70.6 | -30.5 | |
| 74.485 | 43.5 | 151.5 | 129.8 | 35.0 | 93.8 | -76.7 | -33.2 | |
| 79.386 | 38.4 | 155.5 | 134.3 | 39.1 | 99.0 | -83.6 | -45.2 | |
| 84.286 | 35.5 | 167.6 | 137.9 | 45.9 | 100.1 | -82.0 | -46.5 | |
| 89.186 | 29.0 | 171.5 | 141.0 | 53.9 | 99.6 | -78.6 | -49.6 | |
| 94.087 | 32.8 | 179.8 | 140.1 | 63.0 | 106.1 | -86.3 | -53.5 | |

DIRT MISSION CODE FB
 TEST B2, 3 OCT 1978
 CAMERA STATION 1327
 MERGED CLOUD

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) | STEM LEFT (M) | EDGE RT (M) |
|---------------|----------------------|-----------------------|------------------------|----------------------------|----------------------------|------------------|----------------|
| 0.133 | 28.4 | 28.0 | 13.8 | 0.6 | 6.2 | -12.7 | 15.7 |
| 1.801 | 50.7 | 35.9 | 33.2 | -4.7 | 19.9 | -24.6 | 26.1 |
| 3.469 | 61.5 | 41.8 | 40.4 | -7.5 | 24.5 | -30.7 | 30.9 |
| 5.137 | 65.7 | 40.4 | 48.0 | -10.3 | 31.5 | -36.5 | 29.2 |
| 6.805 | 75.2 | 42.5 | 54.2 | -10.5 | 37.4 | -41.4 | 33.8 |
| 8.473 | 72.2 | 42.8 | 54.1 | -14.4 | 36.6 | -44.0 | 28.2 |
| 10.141 | 72.1 | 44.6 | 62.8 | -16.7 | 38.1 | -48.4 | 23.7 |
| 11.809 | 68.6 | 40.4 | 58.7 | -20.2 | 38.9 | -52.6 | 16.0 |
| 13.477 | 73.4 | 40.7 | 58.4 | -24.1 | 38.6 | -57.8 | 15.7 |
| 15.145 | 74.1 | 47.9 | 57.5 | -28.9 | 39.0 | -61.3 | 12.9 |
| 16.813 | 75.0 | 50.5 | 61.3 | -30.8 | 40.6 | -64.3 | 10.7 |
| 18.481 | 80.0 | 46.8 | 58.8 | -35.6 | 40.7 | -71.1 | 8.9 |
| 20.149 | 81.9 | 50.3 | 62.6 | -38.9 | 41.6 | -73.4 | 8.4 |
| 21.817 | 85.9 | 50.6 | 62.0 | -42.9 | 41.9 | -77.6 | 8.3 |
| 23.485 | 88.4 | 51.9 | 60.7 | -46.4 | 44.0 | -81.4 | 7.1 |
| 25.152 | 87.5 | 51.2 | 63.4 | -49.8 | 44.0 | -83.9 | 3.6 |
| 26.820 | 95.9 | 53.1 | 65.0 | -54.1 | 45.2 | -89.3 | 6.6 |
| 28.488 | 98.4 | 54.0 | 65.1 | -57.7 | 45.7 | -93.3 | 5.1 |
| 30.156 | 99.5 | 53.8 | 64.8 | -61.6 | 43.1 | -95.7 | 3.8 |
| 31.824 | 103.7 | 55.6 | 66.4 | -65.5 | 46.4 | -100.9 | 2.8 |
| 33.492 | 104.5 | 54.7 | 68.4 | -70.4 | 48.4 | -105.6 | -1.1 |
| 35.160 | 109.9 | 56.9 | 70.9 | -74.1 | 48.2 | -110.6 | -0.7 |
| 36.828 | 111.8 | 57.7 | 71.8 | -76.3 | 49.4 | -111.8 | 0.0 |
| 38.496 | 110.9 | 58.6 | 74.5 | -81.6 | 49.0 | -114.8 | -3.9 |
| 40.164 | 114.1 | 59.6 | 75.3 | -85.4 | 49.5 | -116.7 | -2.6 |
| 41.832 | 120.3 | 58.9 | 74.9 | -90.2 | 50.4 | -126.7 | -6.4 |
| 43.500 | 123.5 | 61.9 | 78.0 | -93.9 | 50.0 | -129.8 | -6.3 |
| 45.168 | 121.4 | 65.1 | 78.7 | -97.5 | 53.4 | -130.3 | -8.8 |
| 46.836 | 128.1 | 62.6 | 79.7 | -100.9 | 52.5 | -136.4 | -8.3 |
| 48.504 | 125.3 | 65.4 | 78.4 | -103.6 | 54.8 | -137.2 | -11.9 |
| 50.172 | 138.0 | 70.9 | 79.8 | -109.4 | 51.7 | -148.2 | -10.2 |

DIRT MISSION CODE FB
TEST R2, 3 OCT 1978
CAMERA STATION 1327
MERGED CLOUD

PAGE C 15

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) | LEFT STEM LEFT (M) | RIGHT STEM RIGHT (M) | EDGE |
|---------------|-------------------|--------------------|------------------------|----------------------------|----------------------------|-----------------------|-------------------------|------|
| 51.839 | 129.4 | 70.8 | 81.2 | -113.9 | 53.4 | -144.5 | -15.1 | |
| 53.507 | 128.5 | 68.1 | 80.8 | -117.2 | 51.9 | -141.9 | -13.4 | |

DIRT MISSION CODE FB
 TEST B2, 3 OCT 1978
 CAMERA STATION 1328
 DEVELOPING CLOUD

PAGE C 16

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) |
|---------------|-------------------|--------------------|------------------------|-------------------------|-------------------------|
| 0.0 | C1 | 12.8 | 7.0 | 7.3 | 3.5 |
| 0.0 | C2 | 5.7 | 6.2 | 6.5 | 3.2 |
| 0.0 | C3 | 6.1 | 6.9 | 9.4 | 3.8 |
| 0.098 | C1 | 8.2 | 7.9 | 12.1 | -17.0 |
| 0.098 | C2 | 7.1 | 9.0 | 12.8 | -1.9 |
| 0.098 | C3 | 9.8 | 8.4 | 14.2 | 8.9 |
| 0.196 | C1 | 9.1 | 11.3 | 15.0 | -16.1 |
| 0.196 | C2 | 8.4 | 9.1 | 15.2 | -2.4 |
| 0.196 | C3 | 8.0 | 9.7 | 17.3 | 13.8 |
| 0.294 | C1 | 8.0 | 9.0 | 17.1 | -16.6 |
| 0.294 | C2 | 11.2 | 10.7 | 17.2 | -1.3 |
| 0.294 | C3 | 9.1 | 9.2 | 19.0 | 13.6 |
| 0.392 | C1 | 9.6 | 11.2 | 17.9 | -16.2 |
| 0.392 | C2 | 11.8 | 10.3 | 18.5 | -1.9 |
| 0.392 | C3 | 10.8 | 8.4 | 20.5 | 13.4 |
| 0.490 | C1 | 10.2 | 9.8 | 19.3 | -16.9 |
| 0.490 | C2 | 8.2 | 8.2 | 20.3 | -2.2 |
| 0.490 | C3 | 8.2 | 10.0 | 23.3 | 13.8 |
| 0.588 | C1 | 9.9 | 10.7 | 20.4 | -16.7 |
| 0.588 | C2 | 10.2 | 9.8 | 21.1 | -2.3 |
| 0.588 | C3 | 9.1 | 10.3 | 24.6 | 13.7 |
| 0.686 | C1 | 8.0 | 11.7 | 22.7 | -17.1 |
| 0.686 | C2 | 8.7 | 10.4 | 21.8 | -1.5 |
| 0.686 | C3 | 7.6 | 10.1 | 25.6 | 14.0 |
| 0.784 | C1 | 8.4 | 12.3 | 23.3 | -17.9 |
| 0.784 | C2 | 9.6 | 10.4 | 22.4 | -3.0 |
| 0.784 | C3 | 6.6 | 11.3 | 26.9 | 12.8 |
| 0.883 | C1 | 11.3 | 13.0 | 24.7 | -18.3 |
| 0.883 | C2 | 8.2 | 9.8 | 23.4 | -2.5 |
| 0.883 | C3 | 7.5 | 10.1 | 28.7 | 13.0 |
| 0.981 | C1 | 6.3 | 12.2 | 24.9 | -17.8 |
| | | | | | 17.4 |

DIRT MISSION CODE FB
 TEST B2, 3 OCT 1978
 CAMERA STATION 1328
 DEVELOPING CLOUD

PAGE C 17

| TIME (SFC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) |
|---------------|-------------------|--------------------|------------------------|-------------------------|-------------------------|
| 0.981 | C2 | 11.2 | 24.3 | -2.1 | 17.3 |
| 0.981 | C3 | 5.9 | 12.1 | 29.8 | 17.4 |
| 1.079 | C1 | 4.0 | 11.3 | 25.2 | -17.9 |
| 1.079 | C2 | 5.0 | 9.8 | 24.4 | -2.3 |
| 1.079 | C3 | 5.7 | 10.8 | 30.2 | 18.0 |
| 1.177 | C1 | 6.8 | 11.9 | 27.1 | 13.0 |
| 1.177 | C2 | 7.4 | 10.7 | 26.1 | -18.0 |
| 1.177 | C3 | 6.1 | 10.7 | 31.1 | 17.6 |
| 1.275 | C1 | 6.2 | 13.1 | 28.8 | -2.3 |
| 1.275 | C2 | 5.6 | 11.3 | 26.1 | -18.5 |
| 1.275 | C3 | 6.1 | 12.3 | 31.2 | 13.1 |
| 1.373 | C1 | 5.5 | 15.5 | 28.2 | 18.8 |
| 1.373 | C2 | 10.8 | 11.7 | 26.3 | -18.6 |
| 1.373 | C3 | 7.9 | 12.2 | 32.0 | -2.2 |
| 1.471 | C1 | 9.4 | 14.0 | 29.4 | 13.2 |
| 1.471 | C2 | 6.1 | 13.3 | 27.1 | -18.3 |
| 1.471 | C3 | 7.1 | 13.4 | 32.8 | -3.1 |
| 1.569 | C1 | 7.3 | 15.8 | 30.4 | 18.8 |
| 1.569 | C2 | 9.5 | 14.0 | 28.2 | 19.2 |
| 1.569 | C3 | 5.9 | 14.8 | 34.1 | -2.8 |
| 1.667 | C1 | 7.5 | 18.3 | 30.2 | 12.1 |
| 1.667 | C2 | 8.3 | 12.8 | 28.8 | -3.1 |
| 1.667 | C3 | 6.5 | 14.3 | 33.6 | 19.6 |
| 1.765 | C1 | 7.7 | 16.5 | 29.9 | -19.0 |
| 1.765 | C2 | 10.8 | 13.6 | 29.4 | -3.0 |
| 1.765 | C3 | 10.3 | 15.7 | 34.1 | 20.3 |
| 1.863 | C1 | 10.3 | 17.3 | 32.1 | 12.9 |
| 1.863 | C2 | 10.7 | 13.3 | 29.9 | -18.8 |
| 1.863 | C3 | 6.6 | 15.8 | 34.4 | 20.7 |

DIRT MISSION CODE FB
TEST B2, 3 OCT 1978
CAMERA STATION 1328
MERGED CLOUD

PAGE C 18

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD X (M) | CLOUD Z (M) | CENTROID X (M) | CENTROID Z (M) | LEFT (M) | STEM EDGE | RIGHT (M) | EDGE |
|---------------|-------------------|--------------------|------------------------|----------------|----------------|-------------------|-------------------|----------|--------------|-----------|------|
| 1.957 | 38.6 | 47.6 | 34.6 | -3.3 | 18.3 | -23.2 | 15.5 | - | - | - | - |
| 6.851 | 64.8 | 60.8 | 50.3 | -8.1 | 30.8 | -30.3 | 34.5 | - | - | - | - |
| 11.744 | 64.9 | 67.5 | 62.3 | -14.3 | 39.4 | -38.8 | 26.1 | - | - | - | - |
| 16.638 | 57.9 | 76.7 | 71.4 | -16.0 | 39.7 | -47.3 | 10.6 | - | - | - | - |
| 21.531 | 62.5 | 80.3 | 78.0 | -21.1 | 44.9 | -56.1 | 6.5 | - | - | - | - |
| 26.425 | 67.3 | 86.9 | 84.5 | -20.2 | 43.7 | -63.3 | 4.0 | - | - | - | - |
| 31.318 | 73.4 | 93.8 | 89.4 | -25.7 | 47.3 | -70.0 | 3.4 | - | - | - | - |
| 36.212 | 76.0 | 96.8 | 95.2 | -27.1 | 51.2 | -77.6 | -1.6 | - | - | - | - |
| 41.105 | 79.1 | 103.5 | 99.2 | -35.9 | 48.7 | -81.5 | -2.3 | - | - | - | - |
| 45.999 | 87.5 | 109.7 | 101.2 | -34.8 | 51.6 | -95.7 | -8.3 | - | - | - | - |
| 50.892 | 90.3 | 113.4 | 104.2 | -47.2 | 49.5 | -102.8 | -12.6 | - | - | - | - |
| 55.786 | 95.9 | 119.0 | 107.3 | -23.1 | 57.7 | -114.3 | -18.4 | - | - | - | - |
| 60.679 | 104.5 | 125.2 | 111.3 | -31.6 | 56.3 | -127.5 | -23.0 | - | - | - | - |
| 65.573 | 97.9 | 132.7 | 114.7 | -29.6 | 57.9 | -126.2 | -28.3 | - | - | - | - |
| 70.466 | 102.2 | 144.0 | 117.8 | -36.9 | 55.6 | -132.2 | -30.0 | - | - | - | - |
| 75.359 | 98.5 | 151.7 | 121.9 | -27.1 | 61.3 | -136.2 | -37.7 | - | - | - | - |

DIRT MISSION CODE FB
TEST R3, 3 OCT 1978
CAMERA STATION 1327
DEVELOPING CLOUD

PAGE C 19

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | Z (M) |
|---------------|-------------------|--------------------|------------------------|-------------------------|-------|
| 0.0 | C1 | 7.9 | 8.7 | 10.0 | -9.5 |
| 0.0 | C2 | 7.4 | 8.8 | 10.6 | 5.2 |
| 0.0 | C3 | 9.3 | 10.3 | 9.7 | 0.0 |
| 0.033 | C1 | 8.7 | 9.6 | 12.1 | 9.4 |
| 0.033 | C2 | 8.4 | 10.1 | 11.0 | 4.4 |
| 0.033 | C3 | 9.7 | 12.1 | 12.5 | -11.4 |
| 0.067 | C1 | 7.2 | 12.6 | 13.8 | 7.7 |
| 0.067 | C2 | 6.2 | 11.4 | 13.0 | -11.5 |
| 0.067 | C3 | 9.4 | 12.1 | 11.7 | -11.5 |

DIRT MISSION CODE FB
TEST R3, 3 OCT 1978
CAMERA STATION 1327
MERGED CLOUD

PAGE C 20

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID | | | STEM LEFT (M) | EDGE RT (M) |
|---------------|----------------------|-----------------------|------------------------|----------------|-------|-------|------------------|----------------|
| | | | | X (M) | Y (M) | Z (M) | | |
| 0.100 | 30.7 | 33.8 | 15.7 | -1.5 | 9.3 | -14.5 | 16.2 | |
| 1.767 | 34.1 | 36.6 | 38.9 | -3.1 | 24.6 | -19.3 | 14.8 | |
| 3.433 | 39.9 | 30.6 | 48.0 | -5.5 | 33.1 | -23.1 | 16.7 | |
| 5.100 | 35.5 | 27.8 | 52.5 | -7.8 | 36.5 | -25.0 | 10.5 | |
| 6.766 | 55.9 | 29.3 | 58.4 | -10.7 | 41.5 | -24.5 | 31.5 | |
| 8.433 | 57.8 | 30.8 | 63.4 | -13.0 | 45.0 | -27.6 | 30.2 | |
| 10.099 | 60.3 | 31.1 | 68.7 | -16.8 | 52.4 | -31.2 | 29.1 | |
| 11.766 | 62.0 | 49.9 | 79.3 | -24.0 | 59.3 | -34.8 | 27.2 | |
| 13.432 | 62.4 | 50.3 | 83.1 | -28.2 | 62.8 | -37.5 | 24.9 | |
| 15.099 | 50.4 | 51.1 | 86.8 | -31.6 | 64.7 | -39.1 | 11.3 | |
| 16.765 | 50.9 | 52.2 | 90.1 | -36.2 | 68.3 | -41.1 | 9.8 | |
| 18.432 | 52.9 | 56.2 | 95.2 | -40.5 | 71.4 | -43.8 | 9.1 | |
| 20.098 | 55.8 | 59.7 | 98.3 | -44.5 | 75.3 | -46.8 | 9.0 | |
| 21.765 | 57.3 | 57.6 | 100.9 | -48.0 | 76.5 | -51.3 | 6.0 | |
| 23.431 | 57.5 | 54.5 | 103.7 | -49.5 | 78.3 | -51.6 | 5.9 | |
| 25.098 | 55.5 | 57.4 | 108.6 | -54.5 | 80.3 | -52.8 | 2.7 | |
| 26.764 | 59.2 | 65.5 | 112.1 | -60.8 | 83.4 | -56.7 | 2.5 | |
| 28.431 | 59.9 | 69.1 | 115.4 | -65.6 | 84.1 | -58.4 | 1.5 | |
| 30.097 | 61.3 | 70.1 | 117.3 | -70.8 | 86.6 | -61.2 | 0.1 | |
| 31.764 | 61.7 | 74.5 | 119.1 | -76.8 | 94.4 | -62.1 | -0.4 | |
| 33.430 | 62.4 | 81.0 | 120.3 | -81.9 | 96.9 | -63.5 | -1.1 | |
| 35.097 | 65.0 | 76.4 | 123.2 | -89.8 | 100.9 | -65.2 | -0.2 | |
| 36.764 | 55.4 | 79.1 | 126.2 | -93.7 | 103.2 | -59.1 | -3.7 | |
| 38.430 | 66.8 | 79.3 | 126.7 | -105.1 | 108.0 | -67.9 | -1.2 | |
| 40.097 | 70.1 | 80.7 | 128.8 | -111.6 | 108.5 | -71.7 | -1.6 | |
| 41.763 | 63.3 | 75.0 | 131.6 | -118.4 | 110.5 | -63.6 | -0.3 | |
| 43.430 | 70.9 | 84.8 | 131.4 | -122.3 | 112.7 | -70.9 | 0.0 | |
| 45.096 | 77.3 | 82.3 | 134.2 | -130.7 | 113.4 | -77.9 | -0.6 | |
| 46.763 | 78.8 | 85.3 | 133.3 | -137.2 | 113.9 | -78.3 | 0.0 | |
| 48.429 | 53.7 | 62.5 | 131.8 | -148.3 | 113.4 | -66.7 | -13.0 | |
| 50.096 | 66.2 | 57.0 | 134.8 | -163.1 | 118.0 | -82.4 | -16.2 | |

DIRT MISSION CODE FB
TEST R3, 3 OCT 1978
CAMERA STATION 1327
MERGED CLOUD

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) | LEFT (M) | RT (M) | STEM EDGE |
|---------------|----------------------|-----------------------|------------------------|----------------------------|----------------------------|----------|--------|-----------|
| 51.762 | 69.7 | 59.2 | 136.9 | -172.7 | 118.3 | -88.7 | -19.1 | |
| 53.429 | 66.3 | 58.1 | 137.7 | -180.0 | 119.7 | -86.2 | -19.9 | |
| 55.095 | 66.2 | 50.7 | 138.0 | -189.1 | 121.3 | -87.1 | -20.9 | |
| 56.762 | 69.4 | 49.1 | 139.1 | -194.8 | 119.1 | -85.8 | -16.5 | |
| 58.428 | 68.5 | 49.4 | 138.4 | -202.1 | 120.0 | -84.7 | -16.2 | |
| 60.095 | 67.7 | 39.4 | 143.0 | -211.5 | 120.5 | -85.1 | -17.3 | |
| 61.761 | 66.3 | 44.0 | 137.2 | -214.8 | 120.6 | -85.1 | -18.8 | |

DIRT MISSION CODE FB
 TEST 83, 3 OCT 1978
 CAMERA STATION 1328
 DEVELOPING CLOUD

PAGE C 22

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) |
|---------------|-------------------|--------------------|------------------------|-------------------------|-------------------------|
| 0.0 | C1 | 4.3 | 9.6 | 10.6 | 5.6 |
| 0.0 | C2 | 8.9 | 11.6 | 11.2 | 4.6 |
| 0.0 | C3 | 9.9 | 10.7 | 11.7 | 3.8 |
| 0.098 | C1 | 6.5 | 12.6 | 14.3 | 9.7 |
| 0.098 | C2 | 10.0 | 15.4 | 13.1 | -0.2 |
| 0.098 | C3 | 5.8 | 8.8 | 13.2 | 6.4 |
| 0.196 | C1 | 10.0 | 17.4 | 17.8 | -14.7 |
| 0.196 | C2 | 10.6 | 13.7 | 16.3 | -14.7 |
| 0.196 | C3 | 12.4 | 14.3 | 16.3 | -0.2 |
| 0.294 | C1 | 9.1 | 16.9 | 20.7 | -14.3 |
| 0.294 | C2 | 9.2 | 15.7 | 17.8 | -15.0 |
| 0.294 | C3 | 10.4 | 16.7 | 18.8 | -0.9 |
| 0.392 | C1 | 9.7 | 16.7 | 23.4 | 8.4 |
| 0.392 | C2 | 9.6 | 16.0 | 20.3 | 10.2 |
| 0.392 | C3 | 11.8 | 17.9 | 20.0 | 10.2 |
| 0.490 | C1 | 11.3 | 17.8 | 24.5 | -15.0 |
| 0.490 | C2 | 8.6 | 17.3 | 22.2 | -15.6 |
| 0.490 | C3 | 13.1 | 17.5 | 21.0 | -1.2 |
| 0.588 | C1 | 11.5 | 18.6 | 26.1 | 12.8 |
| 0.588 | C2 | 11.3 | 16.6 | 23.8 | -15.1 |
| 0.588 | C3 | 11.8 | 17.5 | 23.0 | 12.3 |
| 0.686 | C1 | 13.1 | 18.0 | 27.2 | -1.5 |
| 0.686 | C2 | 11.8 | 15.0 | 25.8 | 11.4 |
| 0.686 | C3 | 11.7 | 16.2 | 24.8 | -0.8 |
| 0.784 | C1 | 14.7 | 17.5 | 28.9 | 12.4 |
| 0.784 | C2 | 12.0 | 16.7 | 27.1 | -16.2 |
| 0.784 | C3 | 11.4 | 18.3 | 26.0 | -1.7 |
| 0.883 | C1 | 15.1 | 18.8 | 30.2 | 12.4 |
| 0.883 | C2 | 11.5 | 16.9 | 29.0 | -16.4 |
| 0.883 | C3 | 12.2 | 16.8 | 27.4 | -0.1 |

DIRT MISSION CODE F9
 TEST R3, 3 OCT 1978
 CAMERA STATION 1328
 MEPGFD CLOUD

| TIME (SFC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID | | | STEM EDGE LEFT (M) | STEM EDGE RT (M) |
|---------------|----------------------|--------------------|------------------------|----------------|-------|--------|-----------------------|---------------------|
| | | | | X (M) | Y (M) | Z (M) | | |
| 0.979 | 39.9 | 44.0 | 30.7 | -2.5 | 16.4 | -20.9 | 19.0 | |
| 5.872 | 69.6 | 52.3 | 49.4 | -8.7 | 34.9 | -30.8 | 38.8 | |
| 10.764 | 66.0 | 62.8 | 76.1 | -21.8 | 53.7 | -52.9 | 13.1 | |
| 15.657 | 60.3 | 63.5 | 80.8 | -29.3 | 65.1 | -54.0 | 6.3 | |
| 20.550 | 59.7 | 70.0 | 94.4 | -35.3 | 72.2 | -57.5 | 2.3 | |
| 25.443 | 65.0 | 76.4 | 98.7 | -38.9 | 79.8 | -68.4 | -3.5 | |
| 30.336 | 69.8 | 81.0 | 110.3 | -44.7 | 80.4 | -75.7 | -5.9 | |
| 35.229 | 75.8 | 73.7 | 114.3 | -48.3 | 85.7 | -87.8 | -12.0 | |
| 40.122 | 84.8 | 79.1 | 121.1 | -50.5 | 90.4 | -102.8 | -18.1 | |
| 45.015 | 85.2 | 84.1 | 123.4 | -50.6 | 92.3 | -108.8 | -23.6 | |
| 49.908 | 100.5 | 81.5 | 129.7 | -54.0 | 92.7 | -123.7 | -23.2 | |
| 54.801 | 84.8 | 81.4 | 127.0 | -58.0 | 97.6 | -121.4 | -36.6 | |
| 59.694 | 99.7 | 88.2 | 124.2 | -60.3 | 92.4 | -144.1 | -44.4 | |
| 64.587 | 98.4 | 67.5 | 131.9 | -37.5 | 113.7 | -142.5 | -44.1 | |
| 69.480 | 92.3 | 78.0 | 136.9 | -32.1 | 114.7 | -141.7 | -49.4 | |
| 74.373 | 97.6 | 73.7 | 150.2 | -26.5 | 117.9 | -168.5 | -80.9 | |
| 79.266 | 92.0 | 82.5 | 139.2 | -26.2 | 114.2 | -182.3 | -90.4 | |
| 84.159 | 94.7 | 80.5 | 140.8 | -24.5 | 113.1 | -193.1 | -98.4 | |
| 89.052 | 94.8 | 84.4 | 136.9 | -20.4 | 110.7 | -180.8 | -86.1 | |
| 93.945 | 118.1 | 79.0 | 133.8 | -25.9 | 108.1 | -202.7 | -84.6 | |

PIRT MISSION CODE FB
 TEST B4, 3 OCT 1978
 CAMERA STATION 1327
 MERGED CLOUD

| TIME (SFC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) | STEM LEFT (M) | EDGE LEFT (M) | STEM RT (M) |
|---------------|-------------------|--------------------|------------------------|-------------------------|-------------------------|---------------|---------------|-------------|
| 0.0 | 25.5 | 28.2 | 9.0 | 0.6 | 4.2 | -12.8 | 12.7 | |
| 1.668 | 27.1 | 31.8 | 33.4 | -0.5 | 19.0 | -13.5 | 13.5 | |
| 3.336 | 29.5 | 37.3 | 41.5 | -2.3 | 24.5 | -16.4 | 13.2 | |
| 5.004 | 28.9 | 37.3 | 50.1 | -4.5 | 30.1 | -17.3 | 11.6 | |
| 6.673 | 52.0 | 40.8 | 57.1 | -8.9 | 42.3 | -23.4 | 28.5 | |
| 8.341 | 49.4 | 45.7 | 62.0 | -11.8 | 47.3 | -26.9 | 22.5 | |
| 10.009 | 56.6 | 47.5 | 66.4 | -15.2 | 51.8 | -29.6 | 27.0 | |
| 11.677 | 59.5 | 49.8 | 67.6 | -18.5 | 51.7 | -32.5 | 27.0 | |
| 13.345 | 68.7 | 51.3 | 75.0 | -22.5 | 54.8 | -41.5 | 27.2 | |
| 15.013 | 66.9 | 53.8 | 79.5 | -25.1 | 58.6 | -41.0 | 25.8 | |
| 16.681 | 73.3 | 57.0 | 83.9 | -27.9 | 62.2 | -49.4 | 23.8 | |
| 18.350 | 76.6 | 57.7 | 90.5 | -30.0 | 64.6 | -52.0 | 24.7 | |
| 20.018 | 82.5 | 59.7 | 96.8 | -32.9 | 68.7 | -61.6 | 20.9 | |
| 21.686 | 76.8 | 62.3 | 98.2 | -38.6 | 72.6 | -56.4 | 20.4 | |
| 23.354 | 83.8 | 63.8 | 104.3 | -40.7 | 78.0 | -66.0 | 17.8 | |
| 25.022 | 91.4 | 68.0 | 109.4 | -43.6 | 79.1 | -70.0 | 21.5 | |
| 26.690 | 91.4 | 71.4 | 112.7 | -48.8 | 81.5 | -75.9 | 15.5 | |
| 28.359 | 88.4 | 64.8 | 115.3 | -51.9 | 85.6 | -75.5 | 13.0 | |
| 30.027 | 83.5 | 67.2 | 116.7 | -57.9 | 91.8 | -71.2 | 12.3 | |
| 31.695 | 91.0 | 69.7 | 120.5 | -60.3 | 93.6 | -83.3 | 7.6 | |
| 33.363 | 98.1 | 74.3 | 122.8 | -65.9 | 96.8 | -94.2 | 13.9 | |
| 35.031 | 101.7 | 79.9 | 126.4 | -67.9 | 99.1 | -92.0 | 9.7 | |
| 36.699 | 96.9 | 83.0 | 128.8 | -73.7 | 102.5 | -85.8 | 11.0 | |
| 38.367 | 99.2 | 88.7 | 131.8 | -79.0 | 104.1 | -88.7 | 10.5 | |
| 40.036 | 102.9 | 85.5 | 133.3 | -82.7 | 104.9 | -94.7 | 8.1 | |
| 41.704 | 100.4 | 92.6 | 136.1 | -89.9 | 110.5 | -90.4 | 10.1 | |
| 43.372 | 102.2 | 96.2 | 141.8 | -95.3 | 114.0 | -95.5 | 6.7 | |
| 45.040 | 104.9 | 100.5 | 141.9 | -99.7 | 114.6 | -103.5 | 1.4 | |
| 46.708 | 105.1 | 103.8 | 144.7 | -103.7 | 114.7 | -104.9 | 0.2 | |
| 48.376 | 109.7 | 104.0 | 147.9 | -109.3 | 117.0 | -106.9 | 2.0 | |
| 50.044 | 110.7 | 102.7 | 151.8 | -111.4 | 120.0 | -115.3 | -4.5 | |

DIRT MISSION CODE FB
 TEST R4.3 OCT 1978
 CAMERA STATION 1327
 MERGED CLOUD

| TIME (SFC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD X (M) | CLOUD Z (M) | STEM CENTROID (M) | STEM EDGE LEFT (M) | STEM EDGE RT (M) |
|---------------|-------------------|--------------------|------------------------|----------------|----------------|----------------------|-----------------------|---------------------|
| 51.713 | 112.4 | 107.3 | 154.1 | -119.1 | 121.1 | -118.3 | -5.8 | |
| 53.381 | 117.1 | 108.6 | 153.9 | -123.0 | 121.5 | -123.7 | -6.6 | |
| 55.049 | 124.3 | 91.9 | 158.3 | -129.4 | 126.0 | -127.4 | -3.1 | |
| 56.717 | 103.5 | 103.8 | 158.4 | -133.4 | 126.5 | -110.6 | -7.1 | |
| 58.385 | 108.6 | 102.9 | 154.7 | -138.2 | 125.3 | -114.1 | -5.5 | |
| 60.053 | 112.1 | 103.3 | 162.8 | -148.1 | 128.7 | -120.2 | -8.1 | |
| 61.721 | 104.0 | 106.9 | 164.8 | -151.7 | 127.3 | -108.2 | -4.2 | |
| 63.390 | 113.7 | 106.8 | 165.0 | -152.2 | 124.3 | -122.8 | -9.1 | |
| 65.058 | 118.6 | 114.2 | 169.1 | -153.3 | 123.8 | -127.5 | -8.9 | |
| 66.726 | 106.3 | 115.9 | 165.8 | -158.1 | 126.5 | -118.6 | -12.4 | |
| 68.394 | 114.9 | 121.6 | 167.8 | -165.4 | 129.5 | -124.7 | -9.9 | |
| 70.062 | 109.9 | 123.8 | 175.5 | -172.9 | 137.0 | -126.6 | -16.6 | |
| 71.730 | 114.5 | 116.2 | 173.1 | -175.1 | 133.6 | -115.3 | -0.8 | |
| 73.398 | 102.9 | 115.6 | 174.3 | -175.5 | 133.6 | -119.7 | -16.8 | |
| 75.067 | 97.1 | 91.8 | 178.0 | -191.4 | 142.2 | -114.9 | -17.8 | |
| 76.735 | 100.5 | 100.5 | 180.6 | -198.1 | 142.7 | -123.0 | -22.5 | |

DIRT MISSION CODE FB
 TEST B4, 3 OCT 1978
 CAMERA STATION 1328
 DEVELOPING CLOUD

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) |
|---------------|-------------------|--------------------|------------------------|-------------------------|-------------------------|
| 0.0 | C1 | 7.9 | 9.8 | 11.3 | -16.3 |
| 0.0 | C2 | 8.4 | 12.6 | 12.9 | -1.6 |
| 0.0 | C3 | 9.9 | 11.1 | 10.0 | 12.6 |
| 0.098 | C1 | 8.4 | 15.5 | 12.8 | -17.4 |
| 0.098 | C2 | 8.6 | 13.2 | 16.4 | -2.4 |
| 0.098 | C3 | 12.2 | 16.2 | 17.0 | 12.7 |
| 0.196 | C1 | 8.5 | 19.5 | 15.5 | -18.3 |
| 0.196 | C2 | 9.4 | 15.2 | 17.7 | -3.2 |
| 0.196 | C3 | 8.8 | 16.1 | 17.3 | 12.1 |
| 0.294 | C1 | 9.8 | 17.5 | 17.0 | -17.8 |
| 0.294 | C2 | 12.8 | 15.9 | 19.5 | -2.1 |
| 0.294 | C3 | 13.2 | 17.3 | 20.8 | 10.9 |
| 0.392 | C1 | 10.5 | 21.6 | 17.7 | -17.6 |
| 0.392 | C2 | 11.5 | 17.3 | 21.5 | -2.4 |
| 0.392 | C3 | 10.0 | 18.6 | 19.3 | 11.2 |
| 0.490 | C1 | 11.0 | 22.8 | 19.1 | -18.8 |
| 0.490 | C2 | 12.2 | 19.0 | 22.8 | -3.4 |
| 0.490 | C3 | 10.9 | 18.8 | 20.3 | 10.4 |
| 0.588 | C1 | 13.3 | 22.2 | 21.0 | -19.5 |
| 0.588 | C2 | 12.7 | 18.9 | 23.8 | -3.2 |
| 0.588 | C3 | 17.4 | 20.3 | 21.8 | 9.4 |
| 0.686 | C1 | 13.5 | 22.7 | 21.4 | -19.5 |
| 0.686 | C2 | 14.2 | 20.7 | 25.7 | -4.3 |
| 0.686 | C3 | 15.3 | 21.2 | 22.2 | 9.3 |
| 0.784 | C1 | 11.2 | 21.8 | 22.5 | -18.5 |
| 0.784 | C2 | 13.4 | 19.3 | 27.7 | -4.5 |
| 0.784 | C3 | 16.4 | 20.7 | 23.3 | 8.3 |
| 0.882 | C1 | 15.4 | 23.1 | 23.6 | -17.6 |
| 0.882 | C2 | 14.2 | 22.5 | 28.5 | -4.2 |
| 0.882 | C3 | 14.2 | 20.8 | 24.1 | 8.6 |

DIRT MISSION CODE FB
 TEST B4, 3 OCT 1978
 CAMERA STATION 1328
 MERGED CLOUD

PAGE C 27

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) | LEFT (M) | STEM EDGE RT (M) | RIGHT (M) |
|---------------|-------------------|--------------------|------------------------|-------------------------|-------------------------|----------|---------------------|-----------|
| 0.978 | 36.0 | 53.9 | 28.8 | -2.4 | 14.5 | -17.1 | 18.9 | |
| 5.869 | 58.3 | 52.7 | 54.9 | -8.8 | 33.6 | -21.9 | 36.4 | |
| 10.759 | 64.4 | 54.8 | 65.4 | -13.8 | 42.2 | -34.2 | 30.2 | |
| 15.649 | 55.7 | 59.2 | 74.5 | -16.4 | 53.5 | -43.5 | 12.2 | |
| 20.540 | 61.2 | 53.1 | 82.8 | -26.7 | 66.4 | -54.9 | 6.3 | |
| 25.430 | 68.3 | 59.0 | 92.2 | -33.1 | 77.3 | -67.1 | 1.2 | |
| 30.321 | 76.1 | 70.1 | 116.1 | -44.6 | 90.6 | -75.5 | 0.7 | |
| 35.211 | 76.3 | 59.9 | 124.0 | -42.3 | 94.5 | -91.8 | -5.5 | |
| 40.102 | 78.4 | 68.1 | 127.9 | -46.0 | 103.0 | -89.3 | -11.0 | |
| 44.992 | 73.3 | 80.6 | 136.5 | -47.1 | 105.0 | -92.9 | -19.6 | |
| 49.883 | 86.2 | 79.7 | 142.0 | -47.0 | 110.0 | -110.5 | -24.4 | |
| 54.773 | 79.9 | 85.6 | 153.3 | -45.6 | 115.8 | -118.2 | -38.3 | |
| 59.663 | 83.5 | 98.9 | 163.3 | -45.1 | 120.5 | -115.9 | -32.3 | |
| 64.554 | 70.3 | 69.3 | 150.6 | -34.8 | 126.9 | -124.2 | -53.9 | |
| 69.444 | 71.2 | 58.3 | 162.8 | -31.0 | 132.2 | -132.8 | -61.7 | |
| 74.335 | 82.1 | 48.4 | 162.5 | -29.2 | 134.8 | -142.2 | -60.1 | |

DIRT MISSION CODE FB
 TEST B5, 3 OCT 1978
 CAMERA STATION 1327
 DEVELOPING CLOUD

PAGE C 28

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | Z (M) |
|---------------|-------------------|--------------------|------------------------|-------------------------|-------|
| 0.0 | C1 | 9.0 | 9.2 | 9.3 | 4.8 |
| 0.0 | C2 | 8.7 | 9.2 | 12.7 | 0.1 |
| 0.0 | C3 | 8.9 | 10.0 | 10.5 | 5.0 |
| 0.033 | C1 | 9.5 | 10.4 | 13.0 | 9.2 |
| 0.033 | C2 | 9.5 | 12.6 | 13.4 | 4.3 |
| 0.033 | C3 | 8.0 | 12.4 | 13.0 | -12.0 |
| 0.067 | C1 | 10.4 | 13.1 | 14.9 | 6.5 |
| 0.067 | C2 | 10.7 | 12.3 | 14.8 | -0.4 |
| 0.067 | C3 | 9.0 | 12.2 | 15.0 | 6.9 |

DIRT MISSION CODE FB
 TEST 85, 3 OCT 1978
 CAMERA STATION 1327
 MERGED CLOUD

PAGE C 29

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) | LEFT (M) | STEM EDGE RT (M) | EDGE RT (M) |
|---------------|-------------------|--------------------|------------------------|-------------------------|-------------------------|----------|---------------------|----------------|
| 0.100 | 32.2 | 37.8 | 16.4 | -0.2 | 8.0 | -16.7 | 15.5 | |
| 1.767 | 40.7 | 43.9 | 49.4 | -2.9 | 23.0 | -24.6 | 16.2 | |
| 3.434 | 37.1 | 53.5 | 59.3 | -5.4 | 38.2 | -23.5 | 13.5 | |
| 5.101 | 60.7 | 58.6 | 66.5 | -5.9 | 45.0 | -23.4 | 37.3 | |
| 6.768 | 61.4 | 57.6 | 71.3 | -7.3 | 50.4 | -25.0 | 36.5 | |
| 8.434 | 65.0 | 55.2 | 75.2 | -8.4 | 54.2 | -29.1 | 35.9 | |
| 10.101 | 69.1 | 55.3 | 80.0 | -8.0 | 57.1 | -32.4 | 36.7 | |
| 11.768 | 70.8 | 54.9 | 88.5 | -10.8 | 61.0 | -34.5 | 36.4 | |
| 13.435 | 72.1 | 52.9 | 96.1 | -14.1 | 66.4 | -36.5 | 35.6 | |
| 15.102 | 72.8 | 49.8 | 97.9 | -16.7 | 69.3 | -38.4 | 34.4 | |
| 16.769 | 77.4 | 50.5 | 102.9 | -19.1 | 73.2 | -42.8 | 34.6 | |
| 18.436 | 76.1 | 50.6 | 106.8 | -22.4 | 78.7 | -43.5 | 32.5 | |
| 20.103 | 69.4 | 53.6 | 112.4 | -26.3 | 79.8 | -44.8 | 24.6 | |
| 21.770 | 69.1 | 50.0 | 116.6 | -29.3 | 90.7 | -44.6 | 24.5 | |
| 23.436 | 76.6 | 49.1 | 137.2 | -35.0 | 97.5 | -52.8 | 23.8 | |
| 25.103 | 79.3 | 52.2 | 143.4 | -37.3 | 100.8 | -53.6 | 25.6 | |
| 26.770 | 82.4 | 52.8 | 149.1 | -39.8 | 105.1 | -58.4 | 24.1 | |
| 28.437 | 70.3 | 81.9 | 143.7 | -44.7 | 110.1 | -44.1 | 26.1 | |
| 30.104 | 89.8 | 87.2 | 148.6 | -49.9 | 115.3 | -65.1 | 24.7 | |
| 31.771 | 88.8 | 80.7 | 152.3 | -53.7 | 114.4 | -64.1 | 24.8 | |
| 33.438 | 92.4 | 83.3 | 155.9 | -57.8 | 119.6 | -66.9 | 25.5 | |
| 35.105 | 98.6 | 85.2 | 165.5 | -66.4 | 122.5 | -73.0 | 25.6 | |
| 36.772 | 102.5 | 84.6 | 154.9 | -77.1 | 133.5 | -79.4 | 23.1 | |
| 38.438 | 91.0 | 88.3 | 154.7 | -79.7 | 130.1 | -67.3 | 23.7 | |
| 40.105 | 87.8 | 87.5 | 161.3 | -82.4 | 133.0 | -65.3 | 22.5 | |
| 41.772 | 85.4 | 93.1 | 161.8 | -88.6 | 132.7 | -62.8 | 22.5 | |
| 43.439 | 92.3 | 91.0 | 159.3 | -89.8 | 135.4 | -70.2 | 22.2 | |
| 45.106 | 89.1 | 88.8 | 155.7 | -98.1 | 132.7 | -66.6 | 22.5 | |
| 46.773 | 93.2 | 90.1 | 155.2 | -100.6 | 138.4 | -67.2 | 26.0 | |
| 48.440 | 86.7 | 95.0 | 157.7 | -105.8 | 139.0 | -67.4 | 19.4 | |
| 50.107 | 96.9 | 92.7 | 157.2 | -113.0 | 138.1 | -78.7 | 18.2 | |

DIRT MISSION CODE FB
TEST B5, 3 OCT 1978
CAMERA STATION 1327
MERGED CLOUD

PAGE C 30

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) | LEFT (M) | STEM EDGE RT (M) |
|---------------|-------------------|--------------------|------------------------|-------------------------|-------------------------|----------|---------------------|
| 51.774 | 95.3 | 87.9 | 173.2 | -129.2 | 145.5 | -77.5 | 17.8 |
| 53.440 | 96.8 | 86.3 | 179.2 | -136.3 | 144.4 | -79.4 | 17.3 |
| 55.107 | 92.8 | 81.1 | 173.4 | -137.8 | 142.7 | -75.6 | 17.2 |
| 56.774 | 96.7 | 97.4 | 189.9 | -133.9 | 152.6 | -82.6 | 14.0 |
| 58.441 | 83.7 | 98.3 | 199.8 | -140.8 | 149.1 | -69.2 | 14.5 |
| 60.108 | 87.0 | 80.8 | 202.6 | -143.5 | 158.1 | -79.8 | 7.2 |
| 61.775 | 84.6 | 96.6 | 203.1 | -146.6 | 161.2 | -73.3 | 11.3 |
| 63.442 | 113.3 | 98.4 | 200.5 | -155.9 | 165.5 | -106.3 | 7.1 |
| 65.109 | 116.0 | 97.5 | 205.7 | -161.4 | 167.5 | -107.2 | 8.8 |

DIRT MISSION CODE FB
 TEST 85, 3 OCT 1978
 CAMERA STATION 1328
 DEVELOPING CLOUD

PAGE C 31

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID | | |
|---------------|----------------------|-----------------------|------------------------|----------------|-------|-------|
| | | | | X (M) | Y (M) | Z (M) |
| 0.0 | C1 | 6.7 | 9.8 | -13.5 | 4.3 | |
| 0.0 | C2 | 7.1 | 10.1 | -0.6 | 4.7 | |
| 0.0 | C3 | 9.0 | 10.5 | 14.7 | 4.7 | |
| 0.098 | C1 | 6.8 | 16.4 | -14.1 | 9.0 | |
| 0.098 | C2 | 10.4 | 15.8 | -0.1 | 8.1 | |
| 0.098 | C3 | 10.5 | 14.9 | 14.2 | 8.4 | |
| 0.196 | C1 | 6.9 | 18.6 | 20.4 | -14.4 | 11.1 |
| 0.196 | C2 | 8.6 | 14.7 | 16.0 | -0.6 | 8.5 |
| 0.196 | C3 | 11.3 | 18.1 | 18.7 | 14.8 | 9.5 |
| 0.294 | C1 | 9.3 | 20.5 | 24.2 | -15.0 | 13.2 |
| 0.294 | C2 | 10.4 | 19.6 | 19.2 | 0.3 | 10.5 |
| 0.294 | C3 | 10.2 | 18.0 | 20.9 | 13.7 | 10.9 |
| 0.392 | C1 | 9.3 | 21.6 | 27.0 | -15.1 | 14.9 |
| 0.392 | C2 | 11.9 | 19.3 | 21.7 | -0.8 | 12.6 |
| 0.392 | C3 | 10.4 | 19.9 | 22.7 | 12.8 | 13.0 |
| 0.490 | C1 | 10.9 | 20.5 | 29.8 | -14.8 | 15.9 |
| 0.490 | C2 | 11.8 | 17.0 | 23.7 | -0.4 | 13.5 |
| 0.490 | C3 | 10.7 | 20.6 | 24.8 | 12.9 | 15.0 |
| 0.588 | C1 | 10.4 | 23.3 | 32.2 | -14.7 | 17.7 |
| 0.588 | C2 | 10.7 | 18.9 | 27.2 | 1.2 | 16.0 |
| 0.588 | C3 | 11.2 | 19.1 | 26.5 | 12.3 | 15.5 |
| 0.686 | C1 | 11.8 | 22.4 | 34.0 | -13.5 | 19.3 |
| 0.686 | C2 | 12.3 | 19.1 | 27.8 | -0.4 | 15.8 |
| 0.686 | C3 | 11.3 | 20.8 | 27.6 | 11.0 | 15.2 |
| 0.784 | C1 | 15.6 | 22.0 | 37.5 | -13.1 | 19.1 |
| 0.784 | C2 | 15.9 | 20.3 | 29.1 | -0.1 | 15.5 |
| 0.784 | C3 | 14.5 | 21.8 | 29.7 | 10.7 | 16.8 |
| 0.882 | C1 | 15.1 | 20.9 | 36.9 | -13.3 | 22.0 |
| 0.882 | C2 | 14.7 | 20.3 | 31.4 | -0.2 | 16.5 |
| 0.882 | C3 | 14.8 | 23.2 | 30.4 | 10.0 | 16.9 |

DIRT MISSION CODE FB
 TEST P5, 3 OCT 1978
 CAMERA STATION 1328
 MERGED CLOUD

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD X (M) | CENTROID Z (M) | STEM LEFT (M) | EDGE RT (M) |
|---------------|----------------------|-----------------------|------------------------|----------------|-------------------|------------------|----------------|
| 0.978 | 40.6 | 52.3 | 32.8 | 0.1 | 14.8 | -22.2 | 18.4 |
| 5.867 | 72.2 | 55.4 | 65.5 | -3.9 | 41.9 | -28.2 | 44.0 |
| 10.756 | 79.8 | 66.7 | 77.3 | -5.9 | 56.2 | -35.1 | 44.7 |
| 15.645 | 86.3 | 51.6 | 90.5 | 4.9 | 68.2 | -41.7 | 44.6 |
| 20.534 | 90.0 | 59.1 | 113.9 | 6.0 | 80.9 | -44.5 | 45.5 |
| 25.423 | 99.6 | 50.7 | 130.1 | 6.9 | 95.8 | -50.6 | 48.9 |
| 30.312 | 85.2 | 61.0 | 143.5 | 10.9 | 106.1 | -55.8 | 29.4 |
| 35.201 | 82.1 | 68.3 | 147.8 | 11.6 | 111.3 | -58.4 | 23.7 |
| 40.090 | 85.1 | 60.2 | 157.5 | 1.9 | 131.6 | -62.0 | 23.2 |
| 44.979 | 99.3 | 71.2 | 142.1 | -0.5 | 128.0 | -61.5 | 37.8 |
| 49.868 | 95.9 | 67.9 | 159.6 | -19.5 | 135.8 | -51.1 | 44.8 |
| 54.757 | 87.8 | 82.1 | 170.0 | -38.7 | 141.3 | -58.5 | 29.3 |
| 59.646 | 78.4 | 87.5 | 160.2 | -44.6 | 139.8 | -57.8 | 20.5 |
| 64.535 | 74.3 | 84.1 | 167.3 | -41.3 | 144.2 | -52.3 | 22.0 |
| 69.424 | 78.1 | 84.2 | 164.4 | -37.9 | 147.0 | -57.6 | 20.5 |
| 74.313 | 74.4 | 76.8 | 163.4 | -43.4 | 146.7 | -54.6 | 19.9 |
| 79.202 | 93.1 | 69.1 | 165.0 | -43.5 | 146.1 | -71.2 | 21.9 |
| 84.091 | 93.7 | 71.4 | 161.5 | -42.9 | 145.0 | -72.7 | 21.0 |

DIRT MISSION CODE F8
TEST B6, 3 OCT 1978
CAMERA STATION 1327
DEVELOPING CLOUD

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT TOP (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) |
|---------------|----------------------|-----------------------|------------------------|---------------------------------|----------------------------|----------------------------|
| 0.0 | C1 | 13.6 | 8.2 | 8.5 | -7.9 | 3.9 |
| 0.0 | C2 | 7.9 | 7.7 | 9.7 | 0.3 | 3.8 |
| 0.0 | C3 | 8.0 | 8.2 | 12.6 | 9.0 | 4.1 |

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DIRT MISSION CODE FB
 TEST B6, 3 OCT 1978
 CAMERA STATION 1327
 MERGED CLOUD

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) | STEM LEFT (M) | STEM EDGE RT (M) |
|---------------|-------------------|--------------------|------------------------|-------------------------|-------------------------|---------------|---------------------|
| 0.033 | 23.7 | 29.0 | 12.2 | 0.6 | 6.6 | -11.3 | 12.4 |
| 1.699 | 41.5 | 36.5 | 41.9 | -3.7 | 25.2 | -27.3 | 14.2 |
| 3.364 | 34.3 | 45.0 | 51.1 | -7.9 | 33.6 | -26.0 | 8.2 |
| 5.030 | 39.1 | 44.0 | 59.4 | -13.0 | 40.0 | -29.7 | 9.4 |
| 6.695 | 50.9 | 46.9 | 66.7 | -18.0 | 47.6 | -34.8 | 16.1 |
| 8.361 | 54.3 | 47.5 | 73.0 | -23.3 | 50.3 | -38.8 | 15.5 |
| 10.026 | 50.6 | 47.4 | 77.3 | -27.2 | 54.5 | -38.9 | 11.7 |
| 11.692 | 62.1 | 48.5 | 83.2 | -31.0 | 58.2 | -49.9 | 12.2 |
| 13.357 | 62.8 | 47.3 | 87.9 | -34.7 | 62.0 | -53.9 | 8.9 |
| 15.023 | 68.1 | 49.4 | 93.9 | -38.3 | 66.9 | -58.3 | 9.9 |
| 16.688 | 75.8 | 49.0 | 97.7 | -41.7 | 72.1 | -68.6 | 7.2 |
| 18.354 | 71.6 | 47.0 | 106.5 | -44.7 | 74.7 | -64.7 | 6.9 |
| 20.019 | 68.5 | 50.7 | 109.8 | -48.1 | 77.4 | -66.5 | 2.0 |
| 21.685 | 72.9 | 56.4 | 113.3 | -50.1 | 89.2 | -73.8 | -1.0 |
| 23.350 | 80.0 | 58.1 | 114.2 | -50.9 | 91.4 | -79.4 | 0.7 |
| 25.015 | 74.5 | 55.3 | 119.1 | -53.4 | 98.4 | -80.3 | -5.8 |
| 26.681 | 81.2 | 55.5 | 122.0 | -57.6 | 95.0 | -86.6 | -5.4 |
| 28.346 | 81.9 | 61.0 | 127.0 | -60.5 | 100.4 | -90.7 | -8.8 |
| 30.012 | 86.2 | 56.9 | 130.0 | -61.3 | 104.7 | -95.2 | -9.0 |
| 31.677 | 93.6 | 57.5 | 137.7 | -62.6 | 109.8 | -98.2 | -4.6 |
| 33.343 | 84.6 | 59.9 | 140.9 | -63.6 | 113.4 | -103.0 | -18.4 |
| 35.008 | 90.6 | 62.0 | 147.1 | -66.2 | 114.9 | -107.8 | -17.2 |
| 36.674 | 90.3 | 62.5 | 149.0 | -66.7 | 117.8 | -111.7 | -21.4 |
| 38.339 | 91.9 | 63.7 | 155.4 | -68.1 | 122.2 | -112.6 | -20.7 |
| 40.005 | 101.2 | 62.2 | 159.9 | -69.9 | 129.0 | -116.7 | -15.5 |
| 41.670 | 110.7 | 67.9 | 167.1 | -71.9 | 136.5 | -121.4 | -10.7 |
| 43.336 | 95.9 | 73.2 | 177.8 | -71.8 | 140.2 | -122.2 | -26.3 |
| 45.001 | 94.2 | 72.5 | 185.2 | -76.1 | 133.9 | -124.0 | -29.8 |
| 46.667 | 110.3 | 72.8 | 184.2 | -76.2 | 142.2 | -137.8 | -27.5 |
| 48.332 | 109.3 | 73.9 | 182.9 | -79.0 | 143.6 | -142.8 | -33.6 |
| 49.998 | 124.8 | 80.8 | 186.9 | -85.2 | 139.9 | -146.3 | -21.5 |

DIRT MISSION CODE FB
 TEST B6, 3 OCT 1978
 CAMERA STATION 1327
 MERGED CLOUD

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID | | STEM LEFT (M) | EDGE RT (M) |
|---------------|----------------------|-----------------------|------------------------|-------------------|-------|------------------|----------------|
| | | | | X (M) | Z (M) | | |
| 51.663 | 107.7 | 83.8 | 189.4 | -88.4 | 140.3 | -142.2 | -34.5 |
| 53.329 | 116.1 | 82.8 | 193.2 | -92.4 | 144.6 | -149.0 | -32.9 |
| 54.994 | 105.3 | 87.1 | 198.0 | -92.6 | 140.3 | -154.8 | -49.5 |
| 56.660 | 92.8 | 88.1 | 199.4 | -94.8 | 142.2 | -146.9 | -54.1 |
| 58.325 | 115.6 | 82.0 | 208.9 | -98.3 | 151.1 | -160.3 | -44.6 |

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DIRT MISSION CODE FB
 TEST B6, 3 OCT 1978
 CAMERA STATION 1328
 DEVELOPING CLOUD

PAGE C 36

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) |
|---------------|-------------------|--------------------|------------------------|-------------------------|-------------------------|
| 0.0 | C1 | 2.3 | 12.3 | 15.8 | -13.2 |
| 0.0 | C2 | 10.6 | 12.7 | 15.1 | 1.2 |
| 0.0 | C3 | 5.9 | 11.0 | 17.4 | 7.3 |
| 0.098 | C1 | 9.0 | 17.0 | 19.0 | 7.9 |
| 0.098 | C2 | 7.0 | 15.8 | 21.1 | -13.6 |
| 0.098 | C3 | 7.7 | 16.3 | 20.1 | 0.4 |
| 0.196 | C1 | 8.7 | 17.7 | 20.9 | -14.6 |
| 0.196 | C2 | 13.3 | 20.5 | 23.3 | 0.1 |
| 0.196 | C3 | 9.1 | 17.0 | 20.1 | 10.4 |
| 0.294 | C1 | 12.0 | 20.0 | 22.5 | 16.0 |
| 0.294 | C2 | 14.3 | 25.1 | 25.0 | -14.6 |
| 0.294 | C3 | 11.0 | 18.9 | 22.4 | 11.5 |
| 0.392 | C1 | 13.3 | 20.0 | 23.3 | 0.1 |
| 0.392 | C2 | 11.6 | 24.8 | 27.5 | 10.4 |
| 0.392 | C3 | 10.5 | 18.8 | 24.8 | 9.8 |
| 0.489 | C1 | 12.5 | 20.3 | 28.2 | 16.0 |
| 0.489 | C2 | 12.9 | 23.9 | 29.2 | -15.6 |
| 0.489 | C3 | 11.4 | 20.2 | 27.7 | 10.7 |
| 0.587 | C1 | 12.8 | 21.4 | 29.2 | -16.1 |
| 0.587 | C2 | 12.6 | 22.2 | 29.9 | 13.6 |
| 0.587 | C3 | 11.3 | 19.6 | 28.8 | 9.7 |
| 0.685 | C1 | 13.3 | 23.2 | 30.8 | -15.3 |
| 0.685 | C2 | 13.7 | 20.9 | 31.4 | 14.0 |
| 0.685 | C3 | 11.0 | 16.2 | 30.6 | -14.6 |
| 0.783 | C1 | 15.8 | 23.2 | 31.1 | 15.8 |
| 0.783 | C2 | 14.7 | 20.6 | 33.4 | 15.6 |
| 0.783 | C3 | 12.1 | 20.4 | 32.3 | 14.3 |
| 0.881 | C1 | 15.3 | 25.2 | 32.0 | -14.5 |
| 0.881 | C2 | 14.4 | 21.3 | 34.1 | 15.7 |
| 0.881 | C3 | 14.1 | 18.9 | 32.9 | 15.8 |

DIRT MISSION CODE FR
 TEST B6, 3 OCT 1978
 CAMERA STATION 1328
 MERGED CLOUD

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD X (M) | CLOUD Z (M) | LEFT (M) | STEM EDGE LEFT (M) | STEM EDGE RT (M) |
|---------------|----------------------|-----------------------|------------------------|----------------|----------------|----------|--------------------------|------------------------|
| 0.977 | 42.3 | 55.7 | 36.4 | -0.9 | 18.0 | -22.8 | 19.5 | |
| 5.863 | 53.2 | 66.9 | 66.5 | -2.5 | 37.5 | -20.3 | 32.8 | |
| 10.749 | 58.1 | 60.1 | 78.2 | -8.3 | 52.8 | -32.3 | 25.9 | |
| 15.635 | 57.1 | 61.3 | 102.8 | -10.8 | 65.4 | -36.7 | 20.4 | |
| 20.521 | 60.2 | 53.0 | 120.5 | -14.0 | 78.1 | -45.9 | 14.3 | |
| 25.407 | 58.2 | 51.5 | 138.4 | -12.8 | 90.3 | -47.6 | 10.6 | |
| 30.293 | 76.3 | 62.8 | 155.2 | -11.5 | 110.8 | -70.2 | 6.1 | |
| 35.170 | 72.8 | 70.3 | 168.8 | -11.7 | 125.3 | -71.4 | 1.3 | |
| 40.066 | 85.4 | 69.9 | 180.3 | -10.6 | 141.5 | -87.5 | -2.1 | |
| 44.952 | 78.7 | 69.4 | 152.7 | -7.6 | 134.3 | -84.5 | -5.8 | |
| 49.838 | 91.2 | 71.3 | 165.4 | -7.6 | 141.2 | -98.5 | -7.3 | |
| 54.724 | 85.8 | 73.1 | 153.2 | -7.5 | 135.1 | -98.4 | -12.7 | |
| 59.610 | 99.1 | 90.0 | 224.0 | 11.3 | 186.4 | -114.0 | -14.9 | |
| 64.496 | 96.9 | 101.6 | 228.7 | 20.3 | 197.1 | -116.2 | -19.2 | |
| 69.382 | 105.4 | 106.0 | 237.2 | 27.8 | 198.6 | -124.3 | -18.9 | |
| 74.268 | 75.8 | 111.8 | 250.3 | 38.1 | 206.3 | -123.3 | -47.4 | |

DIGIT MISSION CODE FA
TEST 87, 3 OCT 1978
CAMERA STATION 1326
DEVELOPING CLOUD

| TIME (SFC) | STEM WIDTH (m) | CLOUD WIDTH (m) | HT AT CLOUD TOP (m) | CLOUD CENTROID X (m) | CLOUD CENTROID Z (m) |
|---------------|-------------------|--------------------|------------------------|-------------------------|-------------------------|
| 0.0 | C1 0.0 | 9.2 | 9.3 | 12.3 | -8.3 |
| 0.0 | C2 0.0 | 8.2 | 8.2 | 13.8 | 0.5 |
| 0.0 | C3 0.0 | 8.3 | 9.9 | 14.8 | 10.3 |

DIRT MISSION CODE FB
 TEST 87, 3 OCT 1978
 CAMERA STATION 1326
 MERGED CLOUD

PAGE C 39

| TIME (SFCI) | STEM WIDTH (M) | CL DUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTER X (M) | CLOUD CENTER Z (M) | STEM LEFT (M) | EDGE LEFT (M) | STEM RT (M) | EDGE RT (M) |
|----------------|-------------------|---------------------|------------------------|-----------------------|-----------------------|---------------|---------------|-------------|-------------|
| 0.072 | 32.5 | 36.6 | 14.9 | 0.9 | 9.3 | -15.7 | 16.8 | | |
| 3.662 | 30.1 | 46.2 | 62.4 | -0.2 | 37.9 | -21.9 | 8.2 | | |
| 7.252 | 60.3 | 53.1 | 82.6 | -2.5 | 59.7 | -29.1 | 31.2 | | |
| 10.842 | 63.3 | 57.6 | 99.4 | -5.9 | 70.1 | -36.3 | 27.0 | | |
| 14.433 | 69.6 | 62.1 | 108.2 | -8.7 | 78.1 | -42.7 | 26.9 | | |
| 18.023 | 76.4 | 68.9 | 108.0 | -15.2 | 85.6 | -48.9 | 27.6 | | |
| 21.613 | 82.2 | 73.7 | 115.8 | -21.8 | 92.6 | -55.5 | 26.6 | | |
| 25.203 | 85.8 | 75.4 | 121.8 | -27.3 | 100.8 | -61.7 | 24.1 | | |
| 28.794 | 99.1 | 76.7 | 137.4 | -33.0 | 109.7 | -67.8 | 21.3 | | |
| 32.384 | 93.0 | 86.3 | 151.0 | -36.2 | 117.8 | -73.6 | 19.4 | | |
| 35.974 | 100.4 | 91.9 | 162.4 | -39.7 | 128.0 | -81.4 | 19.1 | | |
| 39.564 | 101.1 | 74.9 | 174.0 | -44.4 | 134.6 | -95.9 | 15.2 | | |
| 43.155 | 106.5 | 78.3 | 175.1 | -50.1 | 139.7 | -92.1 | 14.4 | | |
| 46.745 | 111.0 | 81.2 | 181.3 | -59.8 | 145.8 | -99.0 | 12.0 | | |
| 50.335 | 108.8 | 90.8 | 187.0 | -67.4 | 150.8 | -99.6 | 9.2 | | |
| 53.925 | 113.0 | 95.2 | 219.6 | -70.1 | 171.9 | -107.5 | 5.5 | | |
| 57.515 | 123.8 | 96.2 | 213.0 | -73.9 | 178.7 | -113.6 | 10.2 | | |
| 61.106 | 122.0 | 97.7 | 226.3 | -80.1 | 186.9 | -115.8 | 6.2 | | |
| 64.696 | 126.5 | 98.9 | 228.6 | -85.6 | 183.5 | -123.3 | 3.2 | | |
| 68.286 | 124.7 | 94.8 | 232.3 | -91.4 | 187.7 | -124.9 | -0.2 | | |
| 71.976 | 131.0 | 99.7 | 237.0 | -99.0 | 199.7 | -135.0 | -4.0 | | |
| 75.467 | 141.5 | 111.8 | 235.1 | -105.2 | 200.1 | -145.8 | -4.4 | | |
| 79.057 | 128.7 | 111.0 | 240.4 | -110.6 | 202.8 | -135.9 | -7.2 | | |
| 82.647 | 133.7 | 120.9 | 256.5 | -122.4 | 213.0 | -144.3 | -10.5 | | |
| 85.237 | 127.9 | 122.7 | 253.2 | -128.8 | 208.6 | -145.3 | -17.4 | | |
| 89.828 | 137.6 | 109.5 | 261.4 | -141.4 | 210.3 | -160.3 | -22.6 | | |
| 93.418 | 137.7 | 95.7 | 266.2 | -156.3 | 216.9 | -160.3 | -22.5 | | |
| 97.008 | 128.0 | 124.5 | 266.4 | -173.3 | 224.7 | -153.0 | -25.0 | | |
| 100.598 | 154.4 | 136.9 | 266.9 | -191.0 | 226.0 | -178.3 | -23.8 | | |

DIRT MISSION CODE FB
 TEST B7, 3 OCT 1978
 CAMERA STATION 1328
 DEVELOPING CLOUD

PAGE C 40

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) |
|---------------|-------------------|--------------------|------------------------|-------------------------|-------------------------|
| 0. 0 | C1 | 7.1 | 12.1 | 21.9 | 9.8 |
| 0. 0 | C2 | 13.1 | 15.8 | 15.8 | 8.2 |
| 0. 0 | C3 | 9.8 | 12.4 | 19.7 | 9.0 |
| 0. 098 | C1 | 8.9 | 17.1 | 23.8 | 11.5 |
| 0. 098 | C2 | 15.0 | 15.3 | 19.2 | 10.2 |
| 0. 098 | C3 | 8.4 | 17.0 | 21.3 | 12.3 |
| 0. 196 | C1 | 6.3 | 18.2 | 25.8 | -15.9 |
| 0. 196 | C2 | 9.6 | 18.1 | 21.8 | -0.8 |
| 0. 196 | C3 | 5.9 | 20.3 | 23.3 | 13.0 |
| 0. 294 | C1 | 8.0 | 20.9 | 30.6 | -16.1 |
| 0. 294 | C2 | 17.2 | 17.7 | 25.5 | -1.1 |
| 0. 294 | C3 | 7.7 | 21.6 | 25.3 | 14.2 |
| 0. 392 | C1 | 11.7 | 19.6 | 33.0 | -15.4 |
| 0. 392 | C2 | 11.7 | 19.5 | 27.2 | -1.1 |
| 0. 392 | C3 | 8.3 | 24.6 | 28.8 | 13.2 |
| 0. 491 | C1 | 13.1 | 19.3 | 35.8 | -14.6 |
| 0. 491 | C2 | 12.4 | 19.6 | 29.0 | -1.5 |
| 0. 491 | C3 | 9.4 | 24.8 | 30.7 | 13.4 |
| 0. 589 | C1 | 14.0 | 19.7 | 38.8 | -14.5 |
| 0. 589 | C2 | 13.1 | 20.5 | 31.8 | -2.7 |
| 0. 589 | C3 | 9.3 | 25.2 | 34.7 | 15.6 |
| 0. 687 | C1 | 13.0 | 22.6 | 40.2 | -14.2 |
| 0. 687 | C2 | 10.4 | 18.3 | 32.8 | -1.7 |
| 0. 687 | C3 | 10.8 | 24.3 | 36.5 | 14.6 |
| 0. 785 | C1 | 11.2 | 21.9 | 42.5 | -14.4 |
| 0. 785 | C2 | 14.6 | 20.1 | 34.4 | -3.7 |
| 0. 785 | C3 | 17.7 | 23.6 | 38.3 | 15.4 |
| 0. 883 | C1 | 13.3 | 20.2 | 45.2 | -14.3 |
| 0. 883 | C2 | 16.5 | 23.4 | 35.2 | -3.8 |
| 0. 883 | C3 | 17.2 | 26.9 | 40.6 | 15.8 |

DIRT MISSION CODE FB
 TEST B7, 3 OCT 1978
 CAMERA STATION 1378
 MERGFD CLOUD

PAGE C 41

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) | STEM LEFT (M) | STEM EDGE PT (M) |
|---------------|-------------------|--------------------|------------------------|-------------------------|-------------------------|---------------|---------------------|
| 0.977 | 47.3 | 50.8 | 43.6 | -3.3 | 17.5 | -24.8 | 22.4 |
| 5.862 | 60.8 | 70.6 | 77.9 | 1.2 | 50.3 | -17.8 | 43.0 |
| 10.748 | 48.0 | 81.1 | 97.8 | -2.0 | 62.2 | -18.6 | 29.4 |
| 15.633 | 68.1 | 89.1 | 120.6 | -3.3 | 76.9 | -35.9 | 32.2 |
| 20.518 | 82.1 | 88.2 | 139.2 | -2.0 | 87.4 | -47.3 | 34.8 |
| 25.403 | 92.3 | 82.4 | 158.9 | -0.6 | 98.3 | -55.9 | 36.5 |
| 30.289 | 100.3 | 87.4 | 175.7 | 7.7 | 107.8 | -63.4 | 36.9 |
| 35.174 | 98.3 | 90.9 | 189.8 | 3.8 | 121.5 | -58.8 | 39.5 |
| 40.059 | 99.0 | 90.2 | 202.4 | 9.4 | 143.3 | -57.5 | 41.5 |
| 44.944 | 107.0 | 79.1 | 214.7 | 9.8 | 166.4 | -63.7 | 43.3 |
| 49.830 | 104.0 | 83.5 | 221.3 | 8.2 | 171.1 | -62.4 | 41.5 |
| 54.715 | 111.1 | 74.8 | 229.2 | 6.0 | 175.8 | -67.5 | 43.6 |
| 59.600 | 107.0 | 78.7 | 238.7 | 6.5 | 184.9 | -63.8 | 43.1 |
| 64.486 | 103.5 | 87.2 | 246.0 | 15.7 | 193.8 | -61.8 | 41.7 |
| 69.371 | 111.2 | 117.2 | 249.4 | 20.4 | 194.1 | -71.8 | 39.4 |

DIRT MISSION CODE FB
TEST C1, 5 OCT 1978
CAMERA STATION 1326
MERGED CLOUD

DATE 142

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) | LEFT STEM END (M) | RIGHT STEM END (M) |
|---------------|-------------------|--------------------|------------------------|-------------------------|-------------------------|----------------------|-----------------------|
| 0.0 | 282.8 | 288.7 | 10.0 | -0.8 | 4.8 | -141.3 | 141.5 |
| 5.199 | 273.0 | 279.8 | 37.5 | -10.5 | 21.0 | -150.6 | 122.3 |
| 10.398 | 281.9 | 277.2 | 47.8 | -18.2 | 25.1 | -151.6 | 130.3 |
| 15.596 | 305.6 | 267.2 | 58.5 | -24.1 | 29.0 | -175.5 | 130.2 |
| 20.795 | 300.5 | 269.3 | 62.8 | -29.9 | 33.8 | -174.6 | 125.8 |
| 25.994 | 296.7 | 276.9 | 69.6 | -43.1 | 38.4 | -177.9 | 118.8 |
| 31.193 | 278.4 | 296.5 | 87.9 | -49.5 | 41.8 | -165.5 | 112.9 |
| 36.392 | 294.4 | 303.3 | 92.0 | -58.4 | 43.1 | -184.0 | 110.4 |
| 41.590 | 275.2 | 303.4 | 97.1 | -72.7 | 53.6 | -179.7 | 95.5 |
| 46.789 | 281.9 | 313.2 | 105.2 | -81.6 | 48.7 | -194.7 | 87.2 |
| 51.988 | 303.4 | 323.3 | 111.1 | -91.7 | 54.0 | -212.9 | 90.5 |
| 57.187 | 296.5 | 325.7 | 116.3 | -97.9 | 61.0 | -220.5 | 76.0 |
| 62.386 | 304.4 | 340.3 | 127.8 | -112.1 | 64.1 | -230.9 | 73.5 |
| 67.584 | 306.1 | 343.5 | 124.8 | -120.2 | 67.2 | -240.6 | 65.5 |
| 72.783 | 302.0 | 351.1 | 131.2 | -134.1 | 70.4 | -243.4 | 58.6 |
| 77.982 | 319.8 | 350.8 | 135.6 | -141.5 | 73.4 | -263.6 | 56.2 |
| 83.181 | 308.2 | 355.6 | 132.6 | -153.6 | 71.7 | -263.4 | 44.7 |
| 88.380 | 328.2 | 366.2 | 135.5 | -163.1 | 74.1 | -287.3 | 41.0 |
| 93.578 | 333.8 | 373.8 | 135.6 | -179.1 | 77.3 | -297.6 | 46.3 |
| 98.777 | 336.8 | 376.6 | 138.7 | -192.7 | 81.8 | -302.6 | 34.2 |
| 103.976 | 354.2 | 380.8 | 142.5 | -200.2 | 81.6 | -321.1 | 33.1 |
| 109.175 | 362.2 | 388.4 | 141.8 | -206.9 | 84.3 | -338.2 | 24.0 |
| 114.374 | 387.8 | 402.4 | 142.7 | -214.6 | 81.5 | -375.1 | 12.8 |
| 119.572 | 361.5 | 386.4 | 141.5 | -233.3 | 81.1 | -349.8 | 11.6 |

DIRT MISSION CODE FA
 TEST C1, 5 OCT 1978
 CAMERA STATION 1328
 MERGED CLOUD

PAGE C 43

| TIME (SEC) | STEM WIDTH (M) | CLNUD WIDTH (M) | HT AT CLNUD TOP (M) | CLNUD CENTROID X (M) | CLNUD CENTROID Z (M) | STEM LEFT (M) | STEM RIGHT (M) | EDGE LEFT (M) | EDGE RIGHT (M) |
|---------------|----------------------|-----------------------|------------------------|----------------------------|----------------------------|------------------|-------------------|------------------|-------------------|
| 0.0 | 106.4 | 161.8 | 10.7 | 4.2 | 4.9 | -27.6 | 78.8 | | |
| 4.490 | 176.8 | 184.3 | 35.6 | 3.8 | 17.2 | -80.4 | 96.4 | | |
| 8.980 | 181.5 | 190.6 | 45.8 | 10.3 | 22.2 | -76.9 | 104.6 | | |
| 13.470 | 190.5 | 200.6 | 52.9 | 15.2 | 29.3 | -77.4 | 113.1 | | |
| 17.959 | 176.7 | 190.8 | 59.0 | 17.0 | 31.3 | -74.2 | 102.5 | | |
| 22.449 | 178.8 | 196.3 | 69.3 | 18.2 | 33.5 | -72.6 | 106.2 | | |
| 26.939 | 198.5 | 190.9 | 78.3 | 25.2 | 40.0 | -79.0 | 119.5 | | |
| 31.429 | 224.1 | 193.7 | 85.3 | 31.1 | 43.5 | -102.9 | 121.2 | | |
| 35.919 | 236.4 | 192.0 | 92.8 | 33.2 | 48.4 | -102.8 | 133.6 | | |
| 40.409 | 208.5 | 196.0 | 101.2 | 39.1 | 57.7 | -88.7 | 119.8 | | |
| 44.898 | 222.6 | 197.2 | 105.9 | 50.3 | 65.9 | -83.9 | 138.7 | | |
| 49.388 | 230.9 | 217.5 | 111.5 | 71.2 | 75.5 | -87.1 | 143.7 | | |
| 53.878 | 241.5 | 214.7 | 119.8 | 76.4 | 78.7 | -82.8 | 158.7 | | |
| 58.368 | 249.5 | 214.6 | 121.9 | 82.1 | 78.7 | -85.5 | 164.0 | | |
| 62.858 | 262.3 | 200.3 | 127.7 | 80.8 | 81.2 | -86.2 | 176.1 | | |
| 67.348 | 294.7 | 210.6 | 126.6 | 88.6 | 83.9 | -111.5 | 183.2 | | |
| 71.837 | 247.5 | 212.7 | 131.1 | 88.3 | 83.5 | -54.9 | 192.6 | | |
| 76.327 | 281.6 | 226.5 | 134.2 | 94.5 | 83.9 | -62.4 | 219.2 | | |
| 80.817 | 290.0 | 244.4 | 133.8 | 104.0 | 86.0 | -67.3 | 222.7 | | |
| 85.307 | 257.9 | 243.6 | 130.7 | 113.1 | 87.1 | -55.2 | 202.7 | | |
| 89.797 | 290.2 | 253.8 | 131.9 | 122.2 | 86.9 | -56.5 | 233.7 | | |
| 94.287 | 301.0 | 262.0 | 131.8 | 130.7 | 86.6 | -56.5 | 244.6 | | |
| 98.777 | 301.6 | 262.6 | 131.6 | 149.1 | 84.1 | -55.5 | 246.1 | | |
| 103.266 | 244.3 | 276.7 | 134.7 | 142.3 | 83.9 | -55.6 | 188.7 | | |
| 107.756 | 282.6 | 270.2 | 128.0 | 153.0 | 84.5 | -52.9 | 229.6 | | |
| 112.246 | 301.4 | 290.6 | 129.0 | 165.0 | 83.5 | -55.8 | 245.7 | | |
| 116.736 | 293.1 | 300.3 | 123.5 | 174.4 | 85.0 | -56.3 | 236.8 | | |
| 121.226 | 295.2 | 297.8 | 128.7 | 169.2 | 87.7 | -64.5 | 230.8 | | |

DIRT MISSION CODE FB
 TEST C2, 10 OCT 1978
 CAMERA STATION 1326
 MERGED CLOUD

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD X (M) | CLOUD Z (M) | CENTROID X (M) | CENTROID Z (M) | STEM LEFT (M) | STEM RT (M) | EDGE LEFT (M) | EDGE RT (M) |
|---------------|-------------------|--------------------|------------------------|-------------|-------------|-------------------|-------------------|---------------|-------------|---------------|-------------|
| 0.0 | 280.4 | 284.9 | 10.2 | 0.1 | 4.8 | -138.3 | 142.1 | | | | |
| 4.862 | 290.9 | 293.3 | 37.7 | -10.1 | 19.1 | -153.3 | 137.6 | | | | |
| 9.724 | 304.5 | 290.9 | 43.3 | -3.2 | 26.4 | -162.6 | 142.0 | | | | |
| 14.586 | 311.1 | 297.4 | 47.8 | -18.1 | 27.1 | -170.3 | 140.8 | | | | |
| 19.448 | 315.9 | 300.0 | 50.5 | -18.0 | 29.0 | -175.2 | 140.7 | | | | |
| 24.310 | 321.1 | 300.7 | 55.4 | -29.7 | 32.1 | -180.2 | 140.8 | | | | |
| 29.172 | 317.4 | 310.8 | 59.4 | -35.9 | 36.8 | -180.9 | 136.5 | | | | |
| 34.034 | 321.5 | 311.0 | 58.8 | -42.8 | 36.0 | -186.0 | 135.5 | | | | |
| 38.896 | 338.9 | 305.2 | 63.7 | -50.8 | 38.6 | -206.1 | 132.8 | | | | |
| 43.758 | 355.2 | 308.7 | 64.9 | -60.5 | 40.5 | -228.2 | 126.9 | | | | |
| 48.620 | 351.9 | 310.4 | 69.3 | -72.1 | 42.2 | -226.5 | 125.4 | | | | |
| 53.482 | 349.0 | 315.7 | 70.0 | -72.7 | 40.5 | -230.5 | 118.5 | | | | |
| 58.344 | 358.1 | 314.1 | 70.6 | -92.3 | 40.5 | -239.3 | 118.8 | | | | |
| 63.206 | 359.5 | 320.4 | 72.9 | -94.0 | 38.0 | -243.8 | 115.7 | | | | |
| 68.068 | 367.8 | 273.4 | 75.5 | -118.8 | 41.0 | -252.1 | 115.7 | | | | |
| 72.930 | 380.1 | 271.6 | 78.1 | -132.0 | 41.0 | -266.5 | 113.6 | | | | |
| 77.792 | 374.5 | 264.0 | 81.6 | -134.4 | 46.1 | -266.8 | 107.7 | | | | |
| 82.654 | 385.6 | 262.7 | 81.9 | -150.2 | 46.3 | -279.1 | 106.5 | | | | |
| 87.516 | 381.3 | 263.8 | 87.7 | -152.1 | 48.5 | -277.9 | 103.4 | | | | |
| 92.378 | 384.1 | 260.3 | 88.2 | -161.6 | 46.0 | -283.9 | 100.2 | | | | |
| 97.240 | 387.8 | 259.0 | 93.0 | -166.4 | 49.2 | -289.4 | 98.5 | | | | |
| 102.102 | 375.4 | 253.3 | 95.0 | -173.2 | 53.0 | -293.6 | 81.8 | | | | |
| 106.964 | 379.1 | 274.8 | 99.0 | -173.7 | 50.5 | -303.3 | 75.9 | | | | |
| 111.826 | 386.7 | 264.8 | 101.4 | -186.3 | 51.8 | -315.2 | 71.5 | | | | |
| 116.687 | 389.1 | 313.8 | 101.1 | -173.5 | 51.5 | -323.0 | 66.1 | | | | |
| 121.549 | 390.0 | 252.8 | 114.5 | -198.9 | 53.2 | -324.6 | 65.4 | | | | |

DIRT MISSION CODE FB
 TEST C2, 10 OCT 1978
 CAMERA STATION 1327
 Merged Cloud

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) | LEFT (M) | STEM EDGE RT (M) |
|---------------|-------------------|--------------------|------------------------|-------------------------|-------------------------|----------|---------------------|
| 0.0 | 279.1 | 280.4 | 11.8 | 2.9 | 5.2 | -140.6 | 138.6 |
| 5.189 | 292.2 | 302.0 | 51.2 | -16.6 | 20.1 | -158.6 | 133.5 |
| 10.378 | 284.5 | 306.5 | 58.5 | -8.3 | 29.5 | -157.1 | 127.4 |
| 15.567 | 290.5 | 311.8 | 66.3 | -17.3 | 33.2 | -163.4 | 127.1 |
| 20.757 | 307.3 | 317.6 | 69.6 | -23.3 | 33.7 | -174.9 | 132.4 |
| 25.946 | 316.7 | 321.8 | 74.8 | -28.5 | 33.9 | -185.0 | 131.7 |
| 31.135 | 323.7 | 324.4 | 77.4 | -44.2 | 43.5 | -193.0 | 130.7 |
| 36.324 | 327.2 | 329.5 | 75.2 | -53.2 | 44.2 | -202.3 | 125.0 |
| 41.513 | 339.0 | 337.1 | 75.9 | -59.2 | 48.0 | -216.0 | 123.0 |
| 46.702 | 350.7 | 343.1 | 81.9 | -66.9 | 47.1 | -230.0 | 120.6 |
| 51.892 | 348.3 | 343.5 | 84.6 | -81.6 | 52.3 | -234.5 | 113.8 |
| 57.081 | 348.9 | 350.5 | 89.6 | -92.4 | 56.4 | -239.2 | 109.7 |
| 62.270 | 355.4 | 339.7 | 88.2 | -96.6 | 53.9 | -243.9 | 111.5 |
| 67.459 | 363.4 | 352.2 | 88.9 | -99.7 | 54.8 | -257.5 | 105.9 |
| 72.648 | 365.7 | 365.1 | 87.9 | -122.6 | 59.2 | -265.3 | 100.4 |
| 77.837 | 371.9 | 347.2 | 89.6 | -136.1 | 61.3 | -271.7 | 100.2 |
| 83.027 | 380.8 | 346.0 | 97.1 | -143.8 | 66.5 | -278.6 | 102.3 |
| 88.216 | 378.0 | 360.8 | 99.7 | -149.1 | 65.2 | -281.0 | 97.1 |
| 93.405 | 341.8 | 356.8 | 105.1 | -158.6 | 67.5 | -285.4 | 56.4 |
| 98.594 | 386.6 | 356.1 | 106.6 | -170.7 | 72.2 | -295.5 | 91.0 |
| 103.783 | 373.1 | 362.2 | 106.9 | -173.2 | 79.3 | -299.8 | 73.4 |
| 108.972 | 367.2 | 362.9 | 108.4 | -185.9 | 82.6 | -301.4 | 65.8 |
| 114.162 | 376.6 | 352.5 | 110.1 | -194.4 | 85.6 | -305.6 | 71.0 |
| 119.351 | 371.3 | 348.7 | 116.8 | -199.0 | 90.8 | -307.9 | 63.4 |
| 124.540 | 365.7 | 346.9 | 117.5 | -212.5 | 96.9 | -311.0 | 54.7 |

DIRT MISSION CONE AA
 TEST D1, 6 OCT 1978
 CAMERA STATION 1326
 MERGED CLOUD

| TIME (SEC) | STEM WIDTH (m) | CLOUD WIDTH (m) | HT AT CLOUD TOP (m) | CLOUD X (m) | CLOUD Z (m) | STEM LEFT (m) | EDGE RT (m) |
|---------------|----------------------|-----------------------|------------------------|----------------|----------------|------------------|----------------|
| 0.0 | 58.8 | 61.7 | 4.2 | -1.6 | 2.2 | -30.5 | 28.4 |
| 5.190 | 70.7 | 72.5 | 26.5 | -9.4 | 14.6 | -39.4 | 31.4 |
| 10.379 | 71.0 | 73.4 | 30.2 | -13.7 | 16.4 | -43.5 | 27.5 |
| 15.569 | 74.4 | 68.7 | 31.8 | -21.5 | 17.7 | -49.4 | 25.0 |
| 20.759 | 74.1 | 65.3 | 37.7 | -26.9 | 19.8 | -53.7 | 20.4 |
| 25.949 | 79.9 | 62.9 | 40.5 | -31.1 | 20.7 | -59.2 | 20.7 |
| 31.138 | 79.0 | 63.0 | 44.3 | -36.5 | 22.5 | -63.2 | 15.8 |
| 36.328 | 80.6 | 73.2 | 53.3 | -40.5 | 25.7 | -67.1 | 13.5 |
| 41.518 | 78.7 | 67.0 | 54.3 | -48.2 | 28.8 | -76.3 | 2.4 |
| 46.708 | 74.5 | 51.3 | 62.0 | -51.2 | 30.3 | -81.2 | -6.7 |
| 51.897 | 95.1 | 59.8 | 65.1 | -52.7 | 30.6 | -99.8 | -4.6 |
| 57.087 | 97.0 | 59.6 | 67.6 | -59.2 | 30.5 | -104.6 | -7.6 |
| 62.277 | 89.4 | 52.6 | 67.0 | -60.4 | 32.2 | -105.8 | -16.4 |
| 67.467 | 96.9 | 54.0 | 67.7 | -63.3 | 33.8 | -111.3 | -14.4 |
| 72.656 | 103.4 | 54.5 | 68.0 | -65.2 | 35.1 | -123.2 | -19.7 |
| 77.846 | 102.2 | 60.0 | 68.4 | -64.0 | 37.1 | -126.7 | -24.5 |
| 82.036 | 109.6 | 67.2 | 70.4 | -62.7 | 35.1 | -130.7 | -21.1 |
| 88.226 | 118.0 | 54.3 | 68.4 | -68.5 | 36.0 | -146.8 | -28.8 |
| 93.415 | 128.7 | 59.5 | 62.7 | -68.7 | 36.2 | -154.1 | -25.4 |
| 98.605 | 115.3 | 58.4 | 63.0 | -72.3 | 32.8 | -160.0 | -44.6 |
| 103.795 | 124.4 | 67.9 | 58.5 | -69.0 | 33.8 | -166.2 | -41.7 |

DIRT MISSION CODE AA
 TEST D1, 6 OCT 1978
 CAMERA STATION 1328
 MERGED CLOUD

PAGE C 47

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) | STEM EDGE LEFT (M) | STEM EDGE RT (M) |
|---------------|-------------------|--------------------|------------------------|-------------------------|-------------------------|-----------------------|---------------------|
| 1.083 | 48.7 | 45.8 | 22.4 | -2.7 | 9.0 | -26.7 | 21.9 |
| 1.173 | 49.8 | 47.6 | 20.4 | -4.9 | 8.6 | -27.6 | 22.2 |
| 1.263 | 49.2 | 41.4 | 21.9 | -4.2 | 9.4 | -24.8 | 24.4 |
| 1.353 | 49.7 | 45.8 | 22.2 | -2.5 | 8.9 | -24.7 | 25.0 |
| 1.444 | 47.8 | 44.0 | 21.8 | -5.1 | 9.8 | -25.3 | 22.5 |
| 1.534 | 48.0 | 42.1 | 21.6 | -5.4 | 8.7 | -26.3 | 21.8 |
| 1.624 | 50.6 | 47.2 | 23.1 | -6.4 | 9.7 | -29.2 | 21.5 |
| 1.714 | 50.4 | 48.5 | 23.3 | -5.4 | 8.8 | -28.8 | 21.7 |
| 1.804 | 52.4 | 46.9 | 22.5 | -4.9 | 9.0 | -29.4 | 23.0 |
| 1.895 | 51.0 | 50.0 | 23.8 | -5.0 | 8.0 | -29.1 | 21.9 |
| 1.985 | 51.2 | 44.0 | 25.0 | -3.2 | 9.0 | -26.1 | 25.1 |
| 2.075 | 52.5 | 46.0 | 23.9 | -6.5 | 9.7 | -29.3 | 23.2 |
| 2.165 | 52.7 | 44.2 | 26.0 | -5.6 | 10.3 | -29.0 | 23.7 |
| 2.256 | 57.3 | 47.6 | 26.7 | -5.4 | 9.9 | -30.1 | 27.2 |
| 2.346 | 54.3 | 43.8 | 24.9 | -6.2 | 10.8 | -28.5 | 25.8 |
| 2.436 | 54.6 | 46.3 | 27.1 | -5.3 | 10.3 | -29.2 | 25.4 |
| 2.526 | 53.8 | 47.3 | 26.2 | -5.4 | 11.0 | -30.2 | 23.6 |
| 2.617 | 51.1 | 46.8 | 26.9 | -5.6 | 11.7 | -27.8 | 23.3 |
| 2.707 | 54.8 | 47.0 | 28.1 | -5.3 | 11.3 | -28.7 | 26.2 |
| 2.797 | 56.1 | 45.8 | 26.9 | -5.3 | 11.3 | -30.7 | 25.4 |
| 2.887 | 56.9 | 48.8 | 27.5 | -5.5 | 11.2 | -30.5 | 26.4 |
| 2.977 | 53.5 | 47.7 | 29.0 | -6.2 | 10.6 | -29.5 | 24.0 |
| 3.068 | 55.4 | 48.2 | 29.4 | -6.9 | 10.4 | -31.8 | 23.6 |
| 3.158 | 53.4 | 49.4 | 29.7 | -6.0 | 11.4 | -29.3 | 24.2 |
| 3.248 | 55.0 | 49.3 | 29.6 | -7.9 | 12.5 | -30.8 | 24.3 |
| 3.338 | 54.7 | 46.8 | 28.5 | -7.8 | 11.1 | -30.5 | 24.2 |
| 3.429 | 53.4 | 49.3 | 29.1 | -6.7 | 12.0 | -30.4 | 23.1 |
| 3.519 | 54.0 | 49.9 | 29.3 | -5.3 | 11.1 | -30.7 | 23.3 |
| 3.609 | 51.5 | 49.3 | 30.3 | -5.9 | 11.7 | -30.0 | 21.5 |

DIRT MISSION CODE AA
TEST D1, 6 OCT 1978
CAMERA STATION 1328
MERGED CLOUD

PAGE C 48

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) | STEM LEFT (M) | EDGE RT (M) |
|---------------|----------------------|-----------------------|---------------------------|----------------------------|----------------------------|------------------|----------------|
| 18.031 | 59.1 | 61.0 | 52.1 | -25.4 | 27.7 | -53.6 | 5.4 |
| 22.539 | 47.2 | 65.6 | 58.8 | -26.1 | 27.5 | -46.0 | 1.1 |
| 27.046 | 48.3 | 64.3 | 66.2 | -26.9 | 25.4 | -45.1 | 3.2 |
| 31.554 | 61.8 | 69.8 | 65.3 | -35.0 | 26.9 | -63.1 | -1.3 |
| 36.062 | 57.1 | 71.4 | 65.6 | -35.3 | 34.9 | -56.1 | 1.0 |
| 40.569 | 57.3 | 76.5 | 66.0 | -40.0 | 30.8 | -62.7 | -5.4 |
| 45.077 | 55.5 | 69.8 | 71.4 | -37.5 | 34.5 | -58.9 | -3.4 |
| 0.902 | 48.7 | 47.3 | 22.0 | -3.6 | 9.3 | -27.2 | 21.5 |
| 0.992 | 48.5 | 47.7 | 20.3 | -1.4 | 7.9 | -25.8 | 22.7 |

PAGE C 49
 DIRT MISSION CODE AA
 TEST D2, 6 OCT 1978
 CAMERA STATION 1326
 MERGED CLOUD

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) | STEM EDGE LEFT (M) | STEM EDGE RT (M) |
|---------------|-------------------|--------------------|------------------------|-------------------------|-------------------------|-----------------------|---------------------|
| 0.208 | 65.5 | 67.8 | 10.0 | -3.9 | 5.1 | -37.5 | 28.0 |
| 5.398 | 73.4 | 68.3 | 32.3 | -11.6 | 16.1 | -46.5 | 26.9 |
| 10.588 | 79.4 | 64.4 | 38.9 | -22.0 | 21.5 | -55.4 | 24.0 |
| 15.778 | 83.9 | 62.1 | 44.7 | -29.5 | 23.2 | -62.8 | 21.1 |
| 20.968 | 85.0 | 59.7 | 44.5 | -37.9 | 24.0 | -69.1 | 15.9 |
| 26.158 | 86.8 | 53.3 | 52.4 | -46.6 | 25.3 | -75.3 | 11.5 |
| 31.348 | 87.5 | 58.4 | 55.4 | -53.1 | 27.9 | -79.8 | 7.6 |
| 36.538 | 85.7 | 62.6 | 61.8 | -52.1 | 32.3 | -85.7 | 0.0 |
| 41.728 | 85.5 | 66.5 | 66.3 | -59.8 | 33.5 | -89.8 | -4.3 |
| 46.918 | 78.2 | 70.9 | 65.2 | -68.1 | 36.4 | -88.8 | -10.6 |
| 52.108 | 79.6 | 66.9 | 66.0 | -73.2 | 40.7 | -90.2 | -10.5 |
| 57.298 | 86.3 | 74.3 | 66.7 | -77.2 | 41.7 | -97.5 | -11.2 |
| 62.488 | 98.5 | 64.0 | 67.3 | -84.6 | 42.0 | -106.7 | -18.2 |
| 67.678 | 85.8 | 70.9 | 64.4 | -92.6 | 42.6 | -106.1 | -20.2 |
| 72.868 | 87.3 | 71.9 | 67.9 | -97.5 | 46.7 | -109.4 | -22.1 |
| 78.058 | 76.4 | 39.7 | 53.4 | -120.9 | 33.7 | -106.9 | -30.6 |
| 83.248 | 81.4 | 78.1 | 66.1 | -70.0 | 55.2 | -109.6 | -28.3 |
| 88.438 | 76.9 | 84.5 | 68.8 | -69.8 | 57.0 | -108.7 | -31.7 |
| 93.628 | 83.1 | 84.5 | 70.9 | -71.0 | 60.9 | -115.5 | -32.4 |
| 98.818 | 81.8 | 82.2 | 74.3 | -78.1 | 65.3 | -112.7 | -31.0 |
| 104.008 | 90.0 | 88.7 | 78.1 | -74.5 | 67.4 | -120.8 | -30.8 |
| 109.198 | 95.7 | 79.4 | 79.9 | -81.0 | 70.7 | -126.9 | -31.2 |
| 114.388 | 106.4 | 74.2 | 83.5 | -76.2 | 74.4 | -129.1 | -22.6 |
| 119.578 | 140.3 | 80.4 | 88.0 | -79.4 | 77.4 | -172.8 | -32.5 |

DIRT MISSION CODE AA
 TEST D2, 6 OCT 1978
 CAMERA STATION 1328
 MERGED CLOUD

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) | STEM LEFT (M) | EDGE LEFT (M) | RT (M) |
|---------------|-------------------|--------------------|------------------------|-------------------------|-------------------------|---------------|---------------|--------|
| 0.090 | 39.7 | 41.3 | 10.7 | 5.5 | 3.5 | -14.7 | 24.9 | |
| 0.180 | 48.7 | 48.8 | 11.2 | -0.9 | 4.5 | -23.6 | 25.0 | |
| 0.271 | 51.6 | 51.5 | 13.5 | -0.1 | 5.4 | -26.5 | 25.0 | |
| 0.361 | 51.1 | 50.5 | 16.6 | 1.2 | 6.7 | -25.9 | 25.2 | |
| 0.451 | 51.7 | 52.0 | 18.0 | 0.9 | 6.8 | -26.3 | 25.3 | |
| 0.541 | 51.3 | 49.2 | 18.8 | 1.7 | 7.0 | -27.2 | 24.1 | |
| 0.631 | 55.3 | 53.9 | 20.3 | 1.8 | 7.5 | -27.5 | 27.8 | |
| 0.722 | 57.8 | 53.4 | 20.9 | 0.5 | 8.1 | -31.4 | 26.4 | |
| 0.812 | 54.7 | 56.7 | 23.3 | -1.3 | 10.0 | -28.7 | 26.0 | |
| 0.902 | 56.3 | 57.1 | 22.7 | -0.4 | 8.6 | -29.8 | 26.4 | |
| 0.992 | 57.7 | 55.3 | 23.0 | -0.8 | 8.8 | -31.3 | 26.3 | |
| 1.082 | 54.2 | 52.0 | 22.2 | -1.9 | 9.8 | -28.1 | 26.1 | |
| 1.172 | 55.7 | 57.0 | 23.6 | -1.3 | 9.1 | -29.4 | 26.3 | |
| 1.263 | 55.1 | 53.6 | 23.6 | -0.4 | 9.5 | -29.6 | 25.5 | |
| 1.353 | 53.6 | 54.8 | 23.7 | -2.2 | 10.5 | -28.5 | 25.1 | |
| 1.443 | 54.6 | 54.9 | 23.7 | -1.2 | 10.9 | -29.7 | 24.8 | |
| 1.533 | 52.8 | 58.7 | 25.7 | -0.8 | 10.5 | -27.8 | 24.9 | |
| 1.623 | 54.6 | 53.3 | 27.5 | -2.6 | 11.3 | -29.3 | 25.3 | |
| 1.714 | 53.3 | 55.2 | 27.0 | -2.6 | 11.5 | -28.1 | 25.1 | |
| 1.804 | 58.6 | 55.8 | 26.4 | 1.3 | 11.4 | -33.7 | 24.9 | |
| 1.894 | 57.2 | 53.7 | 26.9 | -1.5 | 11.2 | -30.9 | 26.3 | |
| 1.984 | 51.8 | 52.9 | 26.4 | -2.7 | 12.8 | -26.8 | 24.9 | |
| 2.074 | 55.8 | 53.9 | 27.6 | -5.0 | 12.3 | -31.8 | 24.0 | |
| 2.165 | 52.9 | 53.2 | 28.6 | -2.8 | 12.7 | -29.3 | 23.6 | |
| 2.255 | 52.7 | 52.5 | 28.2 | -3.8 | 12.7 | -29.3 | 23.4 | |
| 2.345 | 55.1 | 53.2 | 28.0 | 0.0 | 14.3 | -29.5 | 25.6 | |
| 2.435 | 56.0 | 51.5 | 28.1 | -1.5 | 15.2 | -30.8 | 25.2 | |
| 2.525 | 52.9 | 53.1 | 29.5 | -1.9 | 14.9 | -29.0 | 23.9 | |
| 2.615 | 52.8 | 54.4 | 30.7 | -2.0 | 15.9 | -28.8 | 24.0 | |
| 2.706 | 55.5 | 53.3 | 29.4 | -3.2 | 14.6 | -30.6 | 24.9 | |
| 2.796 | 54.8 | 54.6 | 31.0 | -1.6 | 15.2 | -29.6 | 25.2 | |

DIRT MISSION CODE AA
 TEST D2, 6 OCT 1978
 CAMERA STATION 1328
 MERGED CLOUD

PAGE C 51

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) | STEM LEFT (M) | STEM EDGE RT (M) |
|---------------|-------------------|--------------------|------------------------|-------------------------|-------------------------|---------------|---------------------|
| 0.810 | 50.0 | 51.8 | 21.6 | -3.5 | 12.2 | -26.2 | 23.8 |
| 5.312 | 49.4 | 52.4 | 36.1 | -6.3 | 20.7 | -29.9 | 19.5 |
| 9.815 | 62.4 | 53.6 | 45.7 | -13.1 | 22.4 | -37.9 | 24.6 |
| 14.317 | 63.1 | 50.8 | 51.0 | -18.8 | 26.8 | -40.2 | 22.9 |
| 18.819 | 63.6 | 50.0 | 58.1 | -24.4 | 31.9 | -43.7 | 19.9 |
| 23.321 | 64.0 | 53.3 | 62.9 | -29.3 | 32.1 | -45.6 | 18.5 |
| 27.823 | 68.3 | 55.6 | 73.6 | -33.9 | 33.8 | -51.2 | 17.2 |
| 32.325 | 69.1 | 52.5 | 72.7 | -39.3 | 35.2 | -53.1 | 16.0 |
| 36.827 | 70.6 | 49.7 | 82.4 | -45.4 | 41.9 | -55.9 | 14.7 |
| 41.329 | 75.0 | 55.1 | 92.0 | -56.9 | 50.1 | -57.2 | 17.8 |
| 45.831 | 72.2 | 53.9 | 89.5 | -61.0 | 53.6 | -61.4 | 10.8 |
| 50.333 | 76.2 | 49.6 | 93.1 | -69.1 | 48.2 | -63.5 | 12.8 |
| 54.835 | 84.6 | 63.4 | 92.7 | -70.0 | 51.3 | -69.2 | 15.4 |

DIRT MISSION CODE AA
 TEST D3, 6 OCT 1978
 CAMERA STATION 1326
 MERGED CLOUD

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) | STEM LEFT (M) | EDGE RT (M) |
|---------------|----------------------|-----------------------|------------------------|----------------------------|----------------------------|------------------|----------------|
| 0.0 | 65.6 | 67.5 | 8.7 | -0.6 | 4.0 | -33.7 | 31.9 |
| 5.453 | 70.4 | 65.0 | 39.5 | -6.3 | 22.9 | -38.7 | 31.7 |
| 10.905 | 77.5 | 64.8 | 48.3 | -10.0 | 28.4 | -44.7 | 32.8 |
| 16.358 | 82.2 | 63.2 | 53.8 | -15.8 | 31.5 | -49.6 | 32.5 |
| 21.811 | 91.5 | 65.2 | 58.9 | -22.2 | 33.8 | -59.7 | 31.8 |
| 27.263 | 101.6 | 63.7 | 59.4 | -26.6 | 33.6 | -69.2 | 32.4 |
| 32.716 | 112.2 | 64.1 | 61.4 | -32.1 | 35.7 | -80.5 | 31.6 |
| 38.169 | 112.0 | 63.5 | 61.6 | -37.0 | 34.8 | -81.7 | 30.3 |
| 43.621 | 116.6 | 66.7 | 61.4 | -43.0 | 36.7 | -89.9 | 26.7 |
| 49.074 | 118.7 | 58.8 | 61.6 | -48.3 | 35.4 | -92.8 | 25.9 |
| 54.527 | 125.7 | 66.0 | 60.3 | -53.6 | 35.8 | -99.0 | 26.7 |
| 59.980 | 126.5 | 68.5 | 60.2 | -62.0 | 37.4 | -103.3 | 23.2 |
| 65.432 | 125.5 | 68.7 | 58.4 | -68.6 | 36.0 | -104.3 | 21.2 |
| 70.885 | 134.6 | 65.8 | 57.2 | -74.1 | 36.6 | -113.0 | 21.6 |
| 76.338 | 140.2 | 62.0 | 56.5 | -79.1 | 35.1 | -118.8 | 21.4 |
| 81.790 | 141.0 | 69.5 | 56.0 | -86.0 | 35.6 | -122.3 | 18.7 |
| 87.243 | 141.1 | 71.7 | 55.0 | -94.0 | 35.0 | -125.7 | 15.4 |
| 92.696 | 148.5 | 72.2 | 56.0 | -99.5 | 35.3 | -134.3 | 14.2 |
| 98.148 | 152.3 | 71.1 | 57.9 | -107.0 | 34.8 | -139.3 | 13.1 |
| 103.601 | 156.7 | 73.4 | 59.9 | -114.1 | 34.0 | -145.1 | 11.6 |
| 109.054 | 154.4 | 80.7 | 62.0 | -120.4 | 35.5 | -144.8 | 9.7 |
| 114.506 | 167.0 | 83.2 | 64.4 | -123.5 | 40.9 | -159.4 | 7.6 |
| 119.959 | 172.6 | 71.3 | 63.8 | -129.2 | 38.0 | -169.8 | 2.8 |
| 125.412 | 173.5 | 82.2 | 67.8 | -133.6 | 35.8 | -172.1 | 1.5 |
| 130.864 | 175.5 | 75.6 | 71.0 | -137.8 | 37.4 | -179.2 | -3.7 |

DIRT MISSION CODE AA
 TEST D3, 6 OCT 1978
 CAMERA STATION 1328
 MERGED CLOUD

PAGE C 53

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID | | | STEM LEFT (M) | EDGE RT (M) |
|---------------|----------------------|-----------------------|------------------------|----------------|-------|-------|------------------|----------------|
| | | | | X (M) | Y (M) | Z (M) | | |
| 0.0 | 65.9 | 67.4 | 11.1 | -0.1 | 4.1 | -32.6 | 33.3 | |
| 0.090 | 59.8 | 60.2 | 13.6 | 2.6 | 5.6 | -27.2 | 32.6 | |
| 0.180 | 55.3 | 58.7 | 14.8 | -1.2 | 5.5 | -26.7 | 28.6 | |
| 0.270 | 60.4 | 62.4 | 15.7 | 2.1 | 7.5 | -26.5 | 33.8 | |
| 0.360 | 60.3 | 56.4 | 19.4 | 3.1 | 8.1 | -30.3 | 30.0 | |
| 0.451 | 51.2 | 55.9 | 22.1 | 0.5 | 7.6 | -24.3 | 26.9 | |
| 0.541 | 53.3 | 56.6 | 21.8 | 0.1 | 8.7 | -25.9 | 27.5 | |
| 0.631 | 50.3 | 58.6 | 23.7 | 1.4 | 8.7 | -24.7 | 25.7 | |
| 0.721 | 51.7 | 53.3 | 24.7 | 0.8 | 9.5 | -23.9 | 27.8 | |
| 0.811 | 54.4 | 59.6 | 24.2 | 0.5 | 11.0 | -28.3 | 26.1 | |
| 0.901 | 50.8 | 59.8 | 25.6 | 2.7 | 10.7 | -25.0 | 25.8 | |
| 0.991 | 57.2 | 58.5 | 26.2 | 2.1 | 10.9 | -30.9 | 26.3 | |
| 1.081 | 51.5 | 60.8 | 26.8 | 2.0 | 12.5 | -24.6 | 26.9 | |
| 1.172 | 49.0 | 62.5 | 28.0 | 0.9 | 11.9 | -24.8 | 24.3 | |
| 1.262 | 50.0 | 64.5 | 28.4 | 1.4 | 13.7 | -24.1 | 25.9 | |
| 1.352 | 59.3 | 61.6 | 28.8 | -0.1 | 12.3 | -31.9 | 27.5 | |
| 1.442 | 59.4 | 63.8 | 29.7 | 3.7 | 13.4 | -33.8 | 25.6 | |
| 1.532 | 60.8 | 62.3 | 29.4 | 1.9 | 14.2 | -34.0 | 26.7 | |
| 1.622 | 59.7 | 63.8 | 29.9 | 0.8 | 12.9 | -32.5 | 27.2 | |
| 1.712 | 59.3 | 61.7 | 29.9 | 3.3 | 13.6 | -32.2 | 27.2 | |
| 1.802 | 58.6 | 61.6 | 32.3 | 0.8 | 12.6 | -32.7 | 25.9 | |
| 1.893 | 57.4 | 62.3 | 32.9 | 0.9 | 14.1 | -33.3 | 24.1 | |
| 1.983 | 58.3 | 62.7 | 31.5 | 0.8 | 13.1 | -32.1 | 26.3 | |
| 2.073 | 56.3 | 63.2 | 32.3 | 1.3 | 17.8 | -31.8 | 24.6 | |
| 2.163 | 54.2 | 58.2 | 32.4 | 0.2 | 15.6 | -29.5 | 24.7 | |
| 2.253 | 53.0 | 58.1 | 33.4 | 1.4 | 15.7 | -24.8 | 28.1 | |
| 2.343 | 48.4 | 60.7 | 33.8 | 1.6 | 15.6 | -24.3 | 24.1 | |
| 2.433 | 47.4 | 57.6 | 32.7 | 1.3 | 15.2 | -24.9 | 22.5 | |
| 2.523 | 50.3 | 57.4 | 34.6 | -0.8 | 15.2 | -23.9 | 26.3 | |
| 2.614 | 49.1 | 64.3 | 35.0 | -0.2 | 16.0 | -24.1 | 25.0 | |
| 2.704 | 48.9 | 58.9 | 34.9 | 1.3 | 16.3 | -24.9 | | |

DIRT MISSION CODE AA
 TEST D3, 6 OCT 1978
 CAMERA STATION 1328
 MERGED CLOUD

PAGE C 54

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) | STEM LEFT (M) | EDGE RT (M) |
|---------------|-------------------|--------------------|------------------------|-------------------------|-------------------------|---------------|-------------|
| 0.0 | 54.6 | 53.4 | 10.3 | 0.2 | 4.2 | -27.0 | 27.6 |
| 4.500 | 45.8 | 60.1 | 39.5 | 0.3 | 20.8 | -24.5 | 21.4 |
| 9.000 | 48.8 | 61.7 | 48.6 | -3.1 | 25.6 | -26.1 | 22.7 |
| 13.500 | 54.2 | 57.6 | 52.9 | -6.0 | 28.8 | -28.3 | 25.9 |
| 17.999 | 49.4 | 60.5 | 59.4 | -4.3 | 27.3 | -30.8 | 18.6 |
| 22.499 | 64.7 | 59.3 | 58.5 | -10.2 | 32.1 | -32.5 | 32.2 |
| 26.999 | 63.8 | 62.9 | 60.6 | -10.4 | 32.7 | -33.9 | 29.9 |
| 31.499 | 84.7 | 67.3 | 67.2 | -12.1 | 33.4 | -49.7 | 35.0 |
| 35.999 | 81.4 | 67.1 | 68.1 | -16.6 | 33.1 | -50.3 | 31.0 |
| 40.499 | 88.5 | 71.6 | 68.9 | -17.1 | 34.3 | -57.4 | 31.1 |
| 44.998 | 94.8 | 66.0 | 67.4 | -20.9 | 34.7 | -64.4 | 30.4 |
| 49.498 | 92.3 | 74.3 | 65.9 | -20.1 | 33.6 | -64.3 | 27.9 |
| 53.998 | 95.7 | 75.1 | 67.9 | -23.1 | 33.0 | -67.9 | 27.8 |
| 58.498 | 104.1 | 74.8 | 58.9 | -21.3 | 31.8 | -74.4 | 29.6 |
| 62.998 | 104.3 | 80.7 | 63.0 | -26.4 | 29.6 | -80.6 | 23.7 |
| 67.498 | 108.6 | 83.5 | 60.8 | -27.2 | 32.9 | -83.5 | 25.0 |
| 71.997 | 112.5 | 87.3 | 56.7 | -29.9 | 32.4 | -85.6 | 26.9 |

DIRT MISSION CODE AA
 TEST D4, 6 OCT 1978
 CAMERA STATION 1326
 MERGED CLOUD

PAGE C 55

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) | LEFT (M) | STEM EDGE LEFT (M) | RT (M) |
|---------------|-------------------|--------------------|------------------------|-------------------------|-------------------------|----------|-----------------------|--------|
| 0.0 | 62.4 | 64.4 | 9.8 | 0.9 | 4.9 | -32.0 | 30.4 | |
| 4.854 | 76.4 | 58.4 | 40.0 | -4.1 | 21.7 | -33.5 | 43.0 | |
| 9.708 | 77.2 | 60.8 | 49.4 | -7.9 | 28.2 | -40.8 | 36.4 | |
| 14.562 | 86.7 | 64.3 | 62.1 | -8.8 | 35.1 | -48.3 | 38.4 | |
| 19.415 | 97.6 | 79.2 | 72.8 | -18.2 | 38.5 | -58.8 | 38.8 | |
| 24.269 | 97.5 | 89.0 | 77.7 | -25.3 | 42.3 | -60.4 | 37.2 | |
| 29.123 | 106.1 | 99.7 | 81.0 | -30.0 | 43.6 | -73.0 | 33.1 | |
| 33.977 | 107.8 | 93.1 | 86.0 | -29.2 | 48.1 | -74.0 | 33.8 | |
| 38.831 | 131.2 | 102.7 | 89.8 | -30.8 | 51.0 | -98.2 | 33.0 | |
| 43.685 | 135.5 | 106.4 | 86.8 | -31.1 | 49.4 | -103.3 | 32.2 | |
| 48.539 | 136.5 | 100.1 | 89.8 | -33.5 | 56.8 | -104.2 | 32.3 | |
| 53.393 | 144.0 | 106.4 | 96.6 | -38.6 | 58.4 | -116.4 | 27.6 | |
| 58.246 | 132.4 | 114.3 | 100.9 | -43.3 | 59.9 | -102.4 | 30.0 | |
| 63.100 | 128.7 | 110.4 | 106.0 | -45.9 | 67.5 | -97.8 | 30.9 | |
| 67.954 | 126.7 | 108.3 | 107.4 | -49.4 | 71.6 | -100.4 | 26.3 | |
| 72.808 | 130.7 | 108.7 | 100.2 | -48.5 | 68.7 | -103.6 | 27.1 | |
| 77.662 | 124.4 | 105.5 | 108.2 | -54.3 | 69.5 | -103.9 | 20.5 | |
| 82.516 | 122.0 | 112.1 | 101.3 | -51.6 | 69.2 | -103.3 | 18.8 | |
| 87.370 | 125.6 | 119.9 | 99.7 | -54.2 | 66.1 | -110.2 | 15.4 | |
| 92.224 | 120.4 | 123.7 | 101.6 | -54.8 | 72.7 | -114.0 | 6.4 | |
| 97.077 | 103.4 | 129.7 | 104.5 | -49.6 | 74.2 | -104.2 | -0.9 | |
| 101.931 | 100.6 | 131.1 | 106.7 | -49.0 | 77.4 | -112.8 | -12.2 | |
| 106.785 | 99.2 | 106.4 | 108.8 | -49.5 | 83.5 | -111.5 | -12.3 | |
| 111.639 | 98.8 | 127.4 | 112.7 | -50.9 | 84.8 | -115.3 | -16.5 | |

DIRT MISSION CODE AA
 TEST D4, 6 OCT 1978
 CAMERA STATION 1328
 MERGED CLOUD

PAGE C 56

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) | STEM LEFT (M) | EDGE RT (M) |
|---------------|----------------------|-----------------------|------------------------|----------------------------|----------------------------|------------------|----------------|
| 0.270 | 58.3 | 56.3 | 21.1 | -0.7 | 9.3 | -29.2 | 29.2 |
| 0.361 | 51.5 | 53.5 | 21.8 | 1.4 | 10.4 | -25.0 | 26.4 |
| 0.451 | 52.5 | 52.6 | 23.7 | -1.8 | 10.3 | -26.3 | 26.2 |
| 0.541 | 52.1 | 56.8 | 25.0 | -0.4 | 12.5 | -27.8 | 24.3 |
| 0.631 | 50.6 | 56.3 | 26.5 | 0.5 | 11.5 | -26.9 | 23.7 |
| 0.721 | 50.3 | 56.9 | 27.8 | -0.8 | 14.3 | -26.6 | 23.6 |
| 0.811 | 46.5 | 56.5 | 29.0 | -2.3 | 12.8 | -26.6 | 19.9 |
| 0.901 | 48.8 | 54.3 | 29.3 | -1.4 | 14.6 | -26.2 | 22.6 |
| 0.992 | 51.5 | 57.0 | 31.5 | -2.1 | 15.2 | -26.7 | 24.8 |
| 1.082 | 52.5 | 56.9 | 31.0 | -1.4 | 14.2 | -27.1 | 25.4 |
| 1.172 | 45.9 | 53.4 | 31.3 | -2.1 | 15.2 | -25.0 | 20.9 |
| 1.262 | 49.9 | 59.3 | 33.3 | -2.3 | 16.4 | -27.4 | 22.5 |
| 1.352 | 46.1 | 60.5 | 33.8 | -0.7 | 15.9 | -26.3 | 19.8 |
| 1.442 | 47.4 | 60.3 | 33.3 | -0.4 | 16.3 | -22.6 | 24.8 |
| 1.533 | 51.9 | 58.5 | 35.4 | -2.3 | 18.9 | -26.2 | 25.8 |
| 1.623 | 46.4 | 60.2 | 36.1 | -2.7 | 19.3 | -25.2 | 21.2 |
| 1.713 | 60.1 | 58.2 | 35.8 | -1.1 | 17.3 | -29.0 | 31.1 |
| 1.803 | 51.9 | 57.0 | 36.8 | -2.9 | 17.8 | -23.4 | 28.5 |
| 1.893 | 49.3 | 60.5 | 38.0 | -2.1 | 17.6 | -25.8 | 23.5 |
| 1.983 | 47.9 | 59.6 | 37.6 | -1.9 | 19.2 | -26.0 | 21.9 |
| 2.073 | 42.3 | 60.1 | 38.5 | -2.2 | 19.1 | -24.0 | 18.3 |
| 2.164 | 50.3 | 59.6 | 38.7 | -2.5 | 21.6 | -28.5 | 21.8 |
| 2.254 | 56.0 | 59.4 | 40.4 | -2.3 | 18.4 | -29.0 | 27.0 |
| 2.344 | 56.8 | 61.6 | 38.9 | -3.1 | 16.5 | -27.8 | 29.1 |
| 2.434 | 51.1 | 57.4 | 39.5 | -3.8 | 18.9 | -25.6 | 25.5 |
| 2.524 | 53.9 | 61.0 | 38.8 | -3.3 | 19.5 | -25.1 | 28.8 |
| 2.614 | 58.3 | 58.9 | 40.9 | -3.4 | 18.5 | -27.7 | 30.7 |
| 2.704 | 54.6 | 62.4 | 40.7 | -3.8 | 19.1 | -26.8 | 27.8 |
| 2.795 | 41.6 | 61.2 | 42.0 | -5.3 | 18.9 | -21.7 | 20.0 |
| 2.885 | 51.5 | 62.2 | 41.3 | -2.8 | 18.8 | -27.7 | 23.8 |
| 2.975 | 52.4 | 62.7 | 41.5 | -4.1 | 22.2 | -24.9 | 27.5 |

DIRT MISSION CODE AA
 TEST D4, 6 OCT 1978
 CAMERA STATION 1328
 MERGED CLOUD

PAGE C 57

| TIME (SFC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD X (M) | CLOUD Y (M) | CLOUD Z (M) | CENTROID X (M) | CENTROID Y (M) | CENTROID Z (M) | LEFT (M) | STEM EDGE RT (M) |
|---------------|-------------------|--------------------|------------------------|----------------|----------------|----------------|-------------------|-------------------|-------------------|----------|------------------------|
| 3.061 | 58.1 | 60.1 | 43.6 | -5.9 | 18.6 | -29.4 | 28.7 | | | | |
| 7.562 | 58.4 | 59.3 | 55.6 | -6.7 | 29.9 | -29.4 | 29.0 | | | | |
| 12.063 | 65.4 | 60.6 | 67.7 | -7.6 | 33.1 | -35.7 | 29.7 | | | | |
| 16.564 | 88.9 | 71.5 | 82.2 | -16.5 | 47.3 | -46.2 | 42.7 | | | | |
| 21.065 | 99.3 | 72.9 | 76.8 | -31.6 | 55.5 | -57.2 | 42.1 | | | | |
| 25.566 | 123.2 | 74.9 | 83.9 | -38.9 | 59.0 | -67.5 | 55.7 | | | | |
| 30.067 | 127.4 | 88.5 | 92.1 | -49.1 | 64.6 | -74.3 | 53.1 | | | | |
| 34.568 | 130.8 | 94.4 | 90.9 | -60.4 | 64.6 | -71.3 | 59.4 | | | | |
| 39.069 | 141.8 | 106.4 | 98.5 | -70.0 | 66.0 | -71.6 | 70.1 | | | | |
| 43.571 | 155.0 | 105.8 | 109.9 | -79.1 | 69.7 | -79.5 | 75.5 | | | | |
| 48.072 | 163.2 | 96.1 | 109.9 | -91.2 | 72.4 | -86.0 | 77.3 | | | | |
| 52.573 | 190.5 | 95.7 | 115.4 | -107.1 | 75.6 | -98.3 | 92.2 | | | | |
| 57.074 | 173.5 | 75.3 | 108.1 | -117.8 | 76.0 | -82.7 | 90.8 | | | | |
| 61.575 | 173.6 | 72.5 | 113.4 | -129.6 | 79.7 | -86.9 | 86.7 | | | | |
| 66.076 | 183.4 | 78.9 | 113.9 | -128.2 | 76.0 | -98.2 | 85.2 | | | | |
| 70.577 | 187.8 | 77.1 | 115.9 | -129.7 | 77.7 | -99.4 | 88.4 | | | | |
| 75.078 | 198.1 | 73.8 | 115.8 | -134.5 | 80.0 | -108.6 | 89.5 | | | | |
| 79.579 | 207.8 | 77.3 | 113.8 | -137.1 | 80.5 | -108.2 | 99.7 | | | | |

DIRT MISSION CODE FB
 TEST E1, 11 OCT 1978
 CAMFRA STATION 1326
 DEVELOPING CLOUD

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) |
|---------------|-------------------|--------------------|------------------------|-------------------------|-------------------------|
| 0.0 | C1 | 7.5 | 5.9 | 5.3 | -8.8 |
| 0.0 | C2 | 3.7 | 4.5 | 4.0 | 0.2 |
| 0.0 | C3 | 4.2 | 4.9 | 5.3 | 1.6 |
| 0.097 | C1 | 8.0 | 5.6 | 6.8 | -8.9 |
| 0.097 | C2 | 8.4 | 6.2 | 9.7 | 2.7 |
| 0.097 | C3 | 8.7 | 6.3 | 8.1 | -0.4 |
| | | | | 10.1 | 2.1 |

DIRT MISSION CODE FB
 TEST E1, 11 OCT 1978
 CAMFRA STATION 1326
 MERGED CLOUD

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID | | | STEM LEFT (M) | EDGE RT (M) |
|---------------|-------------------|--------------------|------------------------|----------------|-------|-------|------------------|----------------|
| | | | | X (M) | Y (M) | Z (M) | | |
| 0.194 | 37.5 | 33.5 | 9.5 | -3.2 | 4.6 | -22.2 | 15.4 | |
| 5.034 | 77.6 | 33.0 | 28.2 | -2.1 | 14.8 | -44.7 | 32.9 | |
| 9.874 | 77.7 | 32.6 | 39.7 | -3.3 | 20.7 | -53.3 | 24.4 | |
| 14.715 | 85.6 | 41.5 | 45.3 | -6.6 | 23.5 | -60.8 | 24.9 | |
| 19.555 | 90.9 | 44.0 | 49.8 | -6.9 | 29.1 | -64.7 | 26.1 | |

DIRT MISSION CODE FB
 TEST F1, 11 OCT 1978
 CAMERA STATION 1328
 DEVELOPING CLOUD

PAGE C 60

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) |
|---------------|----------------------|-----------------------|---------------------------|----------------------------|----------------------------|
| 0.0 | C1 | 7.6 | 7.0 | 4.4 | 2.9 |
| 0.0 | C2 | 6.6 | 6.8 | -13.5 | -1.8 |
| 0.0 | C3 | 7.7 | 7.8 | 14.3 | 4.0 |
| 0.098 | C1 | 10.6 | 9.1 | -14.5 | 3.2 |
| 0.098 | C2 | 9.1 | 8.4 | -3.3 | 3.9 |
| 0.098 | C3 | 8.7 | 8.5 | 13.6 | 5.1 |
| 0.196 | C1 | 9.4 | 9.5 | -14.5 | 3.8 |
| 0.196 | C2 | 8.5 | 8.6 | -3.2 | 3.8 |
| 0.196 | C3 | 9.0 | 10.0 | 13.2 | 5.5 |
| 0.293 | C1 | 9.8 | 10.5 | 8.6 | 3.8 |
| 0.293 | C2 | 8.4 | 10.6 | -14.9 | 5.3 |
| 0.293 | C3 | 10.0 | 11.1 | 11.8 | -2.9 |
| 0.391 | C1 | 11.4 | 11.5 | 9.3 | 5.9 |
| 0.391 | C2 | 8.6 | 10.8 | 14.1 | 5.1 |
| 0.391 | C3 | 11.7 | 11.3 | -14.7 | 5.3 |
| 0.489 | C1 | 10.3 | 11.0 | 10.7 | -2.3 |
| 0.489 | C2 | 7.8 | 13.4 | 12.8 | 6.6 |
| 0.489 | C3 | 11.8 | 11.9 | -14.9 | 5.5 |
| 0.587 | C1 | 10.4 | 11.3 | 13.1 | 5.5 |
| 0.587 | C2 | 7.5 | 12.8 | -14.9 | 5.5 |
| 0.587 | C3 | 12.2 | 12.7 | -3.3 | 7.7 |
| 0.685 | C1 | 11.3 | 12.6 | 12.3 | 5.5 |
| 0.685 | C2 | 8.6 | 14.0 | -14.9 | 5.8 |
| 0.685 | C3 | 12.3 | 12.9 | -3.0 | 7.5 |
| 0.782 | C1 | 10.2 | 12.4 | 12.4 | 6.5 |
| 0.782 | C2 | 8.8 | 15.0 | -15.4 | 6.4 |
| 0.782 | C3 | 14.1 | 15.1 | -2.3 | 8.1 |
| 0.880 | C1 | 11.3 | 11.6 | 12.8 | 6.9 |
| 0.880 | C2 | 13.5 | 15.8 | -14.7 | 6.8 |
| 0.880 | C3 | 13.2 | 14.6 | -3.2 | 10.5 |
| 0.978 | C1 | 10.6 | 11.2 | 13.5 | 6.9 |
| | | | | -15.8 | 6.8 |

DIRT MISSION CODE FB
TEST EL, 11 OCT 1978
CAMERA STATION 1328
DEVELOPING CLOUD

PAGE C 61

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT TOP (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) |
|---------------|----------------------|-----------------------|------------------------|---------------------------------|----------------------------|----------------------------|
| 0. 978 | C2 | 9.2 | 14.6 | 17.0 | -3.2 | 7.7 |
| 0. 978 | C3 | 12.9 | 14.4 | 14.0 | 13.4 | 6.8 |
| 1. 076 | C1 | 10.2 | 10.6 | 13.9 | -15.6 | 6.8 |
| 1. 076 | C2 | 8.1 | 13.9 | 17.6 | -4.1 | 9.8 |
| 1. 076 | C3 | 13.5 | 14.3 | 14.4 | 12.8 | 7.6 |
| 1. 173 | C1 | 11.3 | 12.7 | 13.8 | -15.3 | 6.1 |
| 1. 173 | C2 | 15.3 | 17.4 | 18.1 | -2.3 | 7.8 |
| 1. 173 | C3 | 14.7 | 15.3 | 14.3 | 13.2 | 7.7 |

DIRT MISSION CODE FR
TEST F1, 11 OCT 1978
CAMERA STATION 1328
MERGED CLOUD

PAGE C 62

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) | STEM LEFT (M) | STEM EDGE RT (M) |
|---------------|-------------------|--------------------|------------------------|-------------------------|-------------------------|---------------|---------------------|
| 1.269 | 42.7 | 42.8 | 17.4 | -3.1 | 7.7 | -21.8 | 20.9 |
| 6.151 | 41.8 | 42.5 | 32.1 | -3.1 | 15.0 | -22.5 | 19.3 |
| 11.032 | 37.9 | 38.5 | 41.1 | -3.1 | 22.8 | -22.6 | 15.3 |
| 15.913 | 42.6 | 44.3 | 48.7 | -3.9 | 24.4 | -29.2 | 13.4 |
| 20.795 | 42.4 | 40.5 | 54.0 | -4.6 | 36.6 | -32.3 | 10.1 |
| 25.676 | 42.5 | 39.0 | 64.4 | -7.6 | 40.7 | -34.3 | 8.2 |
| 30.558 | 42.0 | 38.4 | 72.9 | -6.7 | 46.4 | -36.7 | 5.3 |
| 35.439 | 44.8 | 38.3 | 78.8 | -11.9 | 51.6 | -42.3 | 2.5 |
| 40.320 | 56.8 | 38.5 | 85.8 | -11.6 | 54.1 | -50.1 | 6.8 |
| 45.202 | 57.0 | 41.5 | 92.4 | -13.7 | 63.6 | -52.9 | 4.1 |
| 50.083 | 61.6 | 49.0 | 97.0 | -13.9 | 66.0 | -58.4 | 3.2 |

DIRT MISSION CODE FB
TEST F2, 11 OCT 1978
CAMFRA STATION 1326
DEVELOPING CLOUD

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD | | |
|---------------|-------------------------------------|--------------------|-------------------|-------------------|-------------------|
| | | | TOP (M) | CENTROID X (M) | Z (M) |
| 0.0 | C1 0.0 C2 0.0 C3 0.0 | 14.1 8.0 8.0 | 4.7 3.5 3.1 | 3.0 2.1 5.3 | 1.5 1.1 2.4 |

DIRT MISSION CODE FB
 TEST F2, 11 OCT 1978
 CAMERA STATION 1326
 MERGED CLOUD

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID | | | STEM EDGE LEFT (M) | STEM EDGE RT (M) |
|---------------|-------------------|--------------------|------------------------|----------------|-------|--------|-----------------------|---------------------|
| | | | | X (M) | Y (M) | Z (M) | | |
| 0.097 | 33.1 | 28.9 | 7.1 | -0.5 | 3.5 | -18.1 | 15.0 | |
| 4.932 | 56.2 | 42.7 | 28.8 | -3.6 | 14.4 | -37.6 | 18.6 | |
| 9.768 | 69.4 | 45.9 | 40.6 | -7.4 | 19.5 | -47.1 | 22.3 | |
| 14.604 | 80.4 | 41.7 | 47.6 | -13.1 | 22.8 | -57.9 | 22.5 | |
| 19.440 | 84.9 | 43.4 | 57.4 | -18.3 | 27.9 | -62.7 | 22.2 | |
| 24.276 | 89.6 | 43.3 | 61.7 | -21.9 | 34.7 | -67.9 | 21.7 | |
| 29.111 | 81.5 | 34.6 | 62.3 | -26.4 | 42.5 | -60.5 | 21.0 | |
| 33.947 | 81.3 | 32.7 | 73.6 | -29.6 | 39.9 | -61.2 | 20.1 | |
| 38.783 | 80.9 | 31.7 | 74.7 | -33.9 | 40.4 | -60.1 | 20.8 | |
| 43.619 | 86.6 | 33.0 | 81.0 | -38.7 | 47.5 | -65.7 | 20.9 | |
| 48.455 | 91.0 | 34.6 | 82.8 | -42.4 | 47.8 | -72.9 | 18.1 | |
| 53.290 | 89.2 | 37.6 | 85.5 | -49.1 | 49.9 | -70.4 | 18.8 | |
| 58.126 | 104.1 | 41.8 | 84.6 | -54.9 | 69.4 | -84.6 | 19.5 | |
| 62.962 | 105.7 | 56.8 | 84.8 | -56.4 | 70.2 | -85.6 | 20.0 | |
| 67.798 | 113.4 | 65.1 | 90.7 | -58.8 | 71.4 | -94.8 | 18.6 | |
| 72.633 | 120.4 | 70.0 | 99.9 | -59.8 | 77.5 | -102.2 | 18.2 | |
| 77.469 | 120.2 | 69.2 | 107.9 | -64.9 | 86.9 | -103.6 | 16.5 | |
| 82.305 | 126.1 | 61.3 | 114.9 | -69.5 | 92.3 | -108.6 | 17.5 | |
| 87.141 | 128.5 | 54.4 | 113.6 | -71.5 | 95.0 | -110.5 | 18.0 | |
| 91.977 | 137.2 | 56.7 | 118.2 | -71.9 | 101.4 | -119.8 | 17.4 | |
| 96.812 | 145.0 | 55.1 | 123.7 | -75.9 | 104.5 | -125.8 | 19.2 | |

DIRT MISSION CODE FB
 TEST E2 11 OCT 1978
 CAMERA STATION 1328
 DEVELOPING CLOUD

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT TOP (M) | CLOUD X (M) | CLOUD CENTROID Z (M) |
|---------------|----------------------|-----------------------|------------------------|----------------|----------------------------|
| 0.0 | C1 | 2.7 | 7.1 | 5.1 | -12.7 |
| 0.0 | C2 | 5.6 | 6.0 | 5.3 | 0.6 |
| 0.0 | C3 | 5.4 | 5.9 | 5.2 | 2.7 |
| 0.098 | C1 | 8.9 | 9.2 | 6.3 | 14.7 |
| 0.098 | C2 | 7.4 | 6.6 | 8.3 | -13.5 |
| 0.098 | C3 | 6.8 | 8.3 | 6.4 | -0.7 |
| 0.195 | C1 | 8.7 | 9.3 | 8.2 | 13.5 |
| 0.195 | C2 | 7.1 | 7.7 | 9.8 | 13.5 |
| 0.195 | C3 | 7.4 | 8.8 | 8.3 | 4.1 |
| 0.293 | C1 | 10.8 | 9.9 | 8.9 | -13.2 |
| 0.293 | C2 | 6.8 | 7.5 | 11.9 | 4.6 |
| 0.293 | C3 | 9.3 | 9.4 | 9.0 | -1.4 |
| 0.391 | C1 | 10.3 | 12.6 | 10.1 | 13.3 |
| 0.391 | C2 | 8.3 | 8.8 | 13.1 | 5.2 |
| 0.391 | C3 | 9.0 | 10.3 | 10.4 | 4.7 |
| 0.489 | C1 | 11.5 | 12.8 | 10.0 | -1.2 |
| 0.489 | C2 | 9.3 | 9.6 | 13.9 | 13.4 |
| 0.489 | C3 | 9.8 | 11.2 | 10.7 | -14.7 |
| 0.586 | C1 | 11.7 | 12.8 | 10.1 | 5.1 |
| 0.586 | C2 | 8.7 | 10.5 | 15.2 | -1.3 |
| 0.586 | C3 | 10.1 | 12.2 | 11.9 | 13.6 |
| 0.684 | C1 | 11.9 | 16.7 | 12.7 | -14.1 |
| 0.684 | C2 | 9.9 | 10.3 | 16.0 | 5.6 |
| 0.684 | C3 | 9.8 | 12.3 | 12.2 | -0.8 |
| 0.782 | C1 | 12.2 | 15.1 | 12.6 | 13.3 |
| 0.782 | C2 | 9.3 | 11.3 | 16.9 | 6.5 |
| 0.782 | C3 | 10.4 | 12.4 | 12.8 | 6.0 |
| 0.879 | C1 | 13.1 | 17.5 | 13.3 | -1.9 |
| 0.879 | C2 | 12.5 | 10.3 | 18.4 | -14.2 |
| 0.879 | C3 | 10.8 | 14.3 | 13.7 | 5.3 |

DIRT MISSION CODE FB
 TEST E2 11 OCT 1978
 CAMERA STATION 1328
 MERGED CLOUD

PAGE C 66

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD X (M) | CENTROID Z (M) | LEFT (M) | STEM EDGE RT (M) | EDGE RT (M) |
|---------------|-------------------|--------------------|------------------------|----------------|-------------------|----------|------------------------|----------------|
| 0.976 | 37.4 | 40.3 | 17.3 | -0.8 | 7.9 | -19.0 | 18.4 | |
| 5.854 | 39.2 | 42.3 | 33.2 | -0.6 | 17.3 | -20.3 | 18.9 | |
| 10.733 | 39.5 | 37.5 | 43.6 | 0.0 | 28.4 | -16.7 | 22.8 | |
| 15.611 | 44.5 | 40.4 | 52.8 | -5.7 | 29.7 | -17.9 | 26.6 | |
| 20.489 | 41.5 | 42.8 | 62.4 | -5.0 | 34.7 | -13.2 | 28.3 | |
| 25.368 | 50.3 | 39.3 | 69.8 | -5.7 | 37.8 | -21.8 | 28.5 | |
| 30.246 | 59.4 | 40.2 | 78.8 | -9.0 | 44.5 | -30.6 | 28.9 | |
| 35.125 | 53.8 | 40.9 | 84.7 | -10.7 | 50.1 | -24.9 | 28.9 | |
| 40.003 | 61.8 | 45.6 | 93.0 | -5.7 | 60.9 | -32.3 | 29.5 | |
| 44.882 | 47.3 | 48.5 | 97.1 | -2.3 | 69.6 | -17.0 | 30.4 | |
| 49.760 | 51.8 | 48.2 | 100.0 | -3.1 | 72.1 | -18.8 | 33.0 | |
| 54.638 | 56.3 | 56.4 | 94.1 | -4.4 | 73.5 | -23.0 | 33.3 | |
| 59.517 | 59.0 | 68.9 | 93.8 | -6.5 | 75.0 | -24.5 | 34.5 | |

DIRT MISSION CODE FB
 TEST E3, 11 OCT 1978
 CAMERA STATION 1326
 MERGED CLOUD

PAGE C 67

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) | STEM LEFT (M) | STEM EDGE (M) | RT (M) |
|---------------|-------------------|--------------------|------------------------|-------------------------|-------------------------|---------------|------------------|--------|
| 0.0 | 47.6 | 59.4 | 5.8 | -0.2 | 2.3 | -17.3 | 30.3 | |
| 4.825 | 92.7 | 83.5 | 25.5 | -7.2 | 13.3 | -55.4 | 37.4 | |
| 9.650 | 97.4 | 75.6 | 32.4 | -15.0 | 19.0 | -61.0 | 36.4 | |
| 14.474 | 99.4 | 76.0 | 43.5 | -26.6 | 25.4 | -67.3 | 32.1 | |
| 19.299 | 112.9 | 70.4 | 52.5 | -33.3 | 28.8 | -80.9 | 32.0 | |
| 24.124 | 111.0 | 72.4 | 60.7 | -44.7 | 39.3 | -84.6 | 26.4 | |
| 28.949 | 117.1 | 71.3 | 64.3 | -54.6 | 45.1 | -95.4 | 21.7 | |
| 33.774 | 125.1 | 74.3 | 73.0 | -66.7 | 50.6 | -106.9 | 18.2 | |
| 38.598 | 126.1 | 81.0 | 76.5 | -74.5 | 55.6 | -112.7 | 13.4 | |
| 43.423 | 130.4 | 92.8 | 82.5 | -81.4 | 61.5 | -118.5 | 11.9 | |
| 48.248 | 137.8 | 96.7 | 86.1 | -91.1 | 65.9 | -127.5 | 10.3 | |
| 53.073 | 133.9 | 103.4 | 95.0 | -101.7 | 70.9 | -133.7 | 0.2 | |
| 57.898 | 134.8 | 96.4 | 98.6 | -109.0 | 74.1 | -138.6 | -3.8 | |
| 62.723 | 114.6 | 104.6 | 103.7 | -120.0 | 77.8 | -129.0 | -14.4 | |
| 67.547 | 117.4 | 104.0 | 109.6 | -126.9 | 79.1 | -140.6 | -23.2 | |
| 72.372 | 127.0 | 105.8 | 113.9 | -136.7 | 81.7 | -151.9 | -25.0 | |
| 77.197 | 132.7 | 110.6 | 120.4 | -146.3 | 85.5 | -163.8 | -31.2 | |
| 82.022 | 127.0 | 110.6 | 126.5 | -154.8 | 90.9 | -159.4 | -32.4 | |
| 86.847 | 137.4 | 123.9 | 129.1 | -163.7 | 96.6 | -177.2 | -39.8 | |
| 91.671 | 140.4 | 126.5 | 130.0 | -171.5 | 99.1 | -189.1 | -48.7 | |
| 96.496 | 139.4 | 123.1 | 137.9 | -180.8 | 100.6 | -195.3 | -55.8 | |
| 101.321 | 133.4 | 125.3 | 141.7 | -193.1 | 104.3 | -204.1 | -70.6 | |
| 106.146 | 148.2 | 116.2 | 146.5 | -197.1 | 109.8 | -219.1 | -70.9 | |
| 110.971 | 136.6 | 116.0 | 151.4 | -206.9 | 107.5 | -223.8 | -87.2 | |

DIRT MISSION CODE FB
 TEST E3, 11 OCT 1978
 CAMERA STATION 1328
 MERGED CLOUD

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD | | | STEM LEFT (M) | EDGE RT (M) |
|---------------|----------------------|-----------------------|------------------------|-------|-------|----------|------------------|----------------|
| | | | | X (M) | Z (M) | CENTROID | | |
| 0.0 | 46.3 | 47.3 | 5.9 | 1.2 | 3.0 | | -23.7 | 22.6 |
| 4.876 | 49.6 | 51.0 | 27.4 | -1.7 | 12.8 | | -25.7 | 23.9 |
| 9.752 | 50.8 | 50.2 | 38.4 | -6.8 | 17.4 | | -28.4 | 22.4 |
| 14.628 | 52.6 | 53.6 | 44.2 | -9.8 | 25.0 | | -31.5 | 21.1 |
| 19.504 | 51.8 | 50.6 | 53.3 | -13.1 | 30.6 | | -33.0 | 18.8 |
| 24.380 | 50.3 | 60.6 | 63.2 | -15.1 | 38.6 | | -33.5 | 16.9 |
| 29.257 | 45.1 | 68.1 | 68.8 | -23.9 | 39.1 | | -30.7 | 14.4 |
| 34.133 | 44.2 | 74.5 | 77.1 | -28.7 | 46.1 | | -32.2 | 12.0 |
| 39.009 | 42.3 | 74.3 | 82.4 | -29.8 | 50.2 | | -35.3 | 7.0 |
| 43.885 | 45.1 | 83.9 | 88.2 | -26.5 | 58.6 | | -39.4 | 5.7 |
| 48.761 | 48.1 | 90.7 | 94.5 | -33.7 | 63.1 | | -44.6 | 3.5 |
| 53.637 | 49.7 | 99.7 | 95.8 | -30.8 | 69.5 | | -50.1 | -0.4 |
| 58.513 | 48.7 | 109.5 | 99.6 | -39.8 | 70.0 | | -51.9 | -3.3 |
| 63.389 | 48.7 | 112.9 | 105.6 | -44.4 | 73.4 | | -53.3 | -4.7 |
| 68.265 | 52.0 | 116.6 | 111.5 | -49.1 | 74.8 | | -60.2 | -8.2 |
| 73.141 | 51.8 | 112.1 | 119.6 | -47.3 | 82.9 | | -62.7 | -10.9 |
| 78.017 | 50.7 | 123.3 | 123.7 | -51.4 | 89.1 | | -68.2 | -17.4 |
| 82.894 | 49.9 | 135.8 | 129.8 | -59.7 | 91.5 | | -69.1 | -19.2 |
| 87.770 | 47.5 | 138.8 | 131.3 | -52.5 | 96.0 | | -71.6 | -24.1 |
| 92.646 | 47.3 | 134.6 | 130.6 | -51.2 | 98.8 | | -76.8 | -29.4 |
| 97.522 | 46.8 | 137.7 | 140.8 | -54.9 | 101.4 | | -79.5 | -32.7 |

DIRT MISSION CODE FB
 TEST F4, 11 OCT 1978
 CAMERA STATION 1326
 MERGED CLOUD

PAGE C 69

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD X (M) | CENTROID Z (M) | STEM LEFT (M) | EDGE RT (M) |
|---------------|-------------------|--------------------|------------------------|-------------|----------------|---------------|-------------|
| 0.0 | 82.4 | 67.8 | 6.6 | 0.0 | 3.0 | -44.5 | 37.9 |
| 4.818 | 91.1 | 58.9 | 23.9 | -6.9 | 12.3 | -55.3 | 35.8 |
| 9.636 | 95.8 | 70.4 | 30.0 | -12.6 | 15.2 | -64.3 | 31.5 |
| 14.455 | 94.7 | 70.9 | 35.9 | -19.6 | 21.6 | -70.2 | 24.6 |
| 19.273 | 100.9 | 70.8 | 43.5 | -29.5 | 23.6 | -79.8 | 21.1 |
| 24.091 | 103.2 | 73.1 | 50.5 | -37.7 | 29.0 | -86.1 | 17.0 |
| 28.909 | 107.7 | 75.7 | 56.8 | -46.4 | 33.8 | -93.9 | 13.8 |
| 33.728 | 112.5 | 82.0 | 62.7 | -54.2 | 37.4 | -102.5 | 10.1 |
| 38.546 | 114.3 | 83.5 | 68.7 | -65.1 | 40.4 | -107.6 | 6.7 |
| 43.364 | 113.8 | 89.4 | 76.0 | -73.0 | 46.0 | -111.7 | 2.1 |
| 48.182 | 117.8 | 92.1 | 82.0 | -77.9 | 49.8 | -118.9 | -1.2 |
| 53.001 | 114.8 | 94.0 | 86.4 | -85.8 | 54.0 | -122.0 | -7.3 |
| 57.819 | 121.1 | 89.3 | 91.0 | -95.4 | 57.2 | -130.9 | -9.9 |
| 62.637 | 122.2 | 92.3 | 93.7 | -105.5 | 59.6 | -137.4 | -15.2 |
| 67.455 | 122.4 | 94.4 | 104.1 | -111.3 | 64.2 | -138.7 | -16.3 |
| 72.274 | 119.5 | 96.9 | 94.8 | -119.1 | 65.4 | -142.3 | -22.7 |
| 77.092 | 117.2 | 90.8 | 96.9 | -128.9 | 70.3 | -144.8 | -27.6 |
| 81.910 | 100.7 | 94.6 | 102.5 | -143.8 | 72.2 | -136.0 | -35.2 |
| 86.728 | 116.6 | 97.2 | 110.6 | -153.5 | 78.6 | -152.6 | -36.0 |
| 91.547 | 121.4 | 92.5 | 114.0 | -166.5 | 80.4 | -155.9 | -34.5 |
| 96.365 | 126.6 | 90.1 | 120.1 | -177.6 | 87.1 | -168.2 | -41.6 |
| 101.183 | 127.8 | 90.7 | 127.0 | -184.8 | 92.3 | -180.2 | -52.4 |
| 106.001 | 129.6 | 91.6 | 131.1 | -193.2 | 95.4 | -184.1 | -54.5 |
| 110.820 | 140.2 | 101.9 | 136.2 | -197.8 | 99.9 | -194.0 | -53.8 |

DIRT MISSION CODE FR
TEST E4, 11 OCT 1978
CAMERA STATION 1328
MERGED CLOUD

| TIME (SFCI) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) | STEM LEFT (M) | STEM EDGE RT (M) |
|----------------|-------------------|--------------------|------------------------|-------------------------|-------------------------|---------------|---------------------|
| 0.0 | 45.2 | 46.8 | 7.1 | 0.0 | 3.3 | -22.0 | 23.2 |
| 4.873 | 48.3 | 53.0 | 25.1 | 1.4 | 12.8 | -24.7 | 23.6 |
| 9.746 | 53.9 | 56.8 | 32.0 | -1.1 | 18.8 | -25.9 | 28.0 |
| 14.619 | 56.3 | 56.7 | 35.5 | -2.7 | 21.5 | -28.1 | 28.2 |
| 19.492 | 56.8 | 58.7 | 43.0 | -6.8 | 26.3 | -29.2 | 27.7 |
| 24.366 | 55.4 | 63.5 | 50.0 | -9.0 | 31.6 | -29.5 | 25.9 |
| 29.239 | 56.6 | 69.5 | 57.7 | -13.1 | 36.6 | -32.3 | 24.3 |
| 34.112 | 55.1 | 66.9 | 65.1 | -17.5 | 42.0 | -32.8 | 22.3 |
| 38.985 | 53.8 | 68.4 | 71.7 | -18.2 | 44.7 | -33.8 | 20.1 |
| 43.858 | 52.8 | 76.8 | 78.1 | -20.9 | 49.5 | -33.0 | 19.8 |
| 48.731 | 51.9 | 78.6 | 83.8 | -20.7 | 54.5 | -32.2 | 19.8 |
| 53.604 | 45.5 | 75.3 | 91.2 | -21.2 | 56.4 | -31.4 | 14.1 |
| 58.477 | 46.0 | 81.1 | 93.1 | -22.3 | 58.3 | -32.2 | 13.9 |
| 63.351 | 43.3 | 86.3 | 107.7 | -25.9 | 65.6 | -31.9 | 11.4 |
| 68.224 | 45.4 | 93.0 | 117.4 | -29.4 | 70.3 | -36.6 | 8.8 |
| 73.097 | 45.0 | 97.1 | 127.8 | -29.3 | 70.6 | -35.9 | 9.1 |
| 77.970 | 43.5 | 79.3 | 134.5 | -30.0 | 74.9 | -37.0 | 6.5 |
| 82.843 | 42.2 | 94.9 | 134.9 | -33.2 | 78.8 | -37.5 | 4.7 |
| 87.716 | 43.3 | 93.3 | 140.6 | -33.3 | 77.6 | -37.9 | 5.4 |
| 92.589 | 43.4 | 98.1 | 146.9 | -37.1 | 91.0 | -39.8 | 3.7 |
| 97.462 | 43.8 | 106.4 | 155.1 | -32.9 | 94.5 | -38.9 | 4.9 |

DIRT MISSION CODE AA
 TEST E6, 14 OCT 1978
 CAMERA STATION 1327
 MERGED CLOUD

PAGE C 71

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD X (M) | CENTROID Z (M) | STEM LEFT (M) | EDGE RT (M) |
|---------------|-------------------|--------------------|------------------------|----------------|-------------------|---------------|-------------|
| 0.0 | 59.9 | 32.0 | 8.1 | -0.6 | 3.5 | -45.5 | 14.4 |
| 5.221 | 95.7 | 42.0 | 40.5 | 1.9 | 28.8 | -62.6 | 33.1 |
| 10.443 | 94.4 | 41.2 | 52.4 | 3.0 | 30.2 | -60.4 | 34.1 |
| 15.664 | 94.1 | 51.3 | 56.9 | 3.8 | 36.5 | -59.3 | 34.7 |
| 20.886 | 94.4 | 53.2 | 62.5 | 3.9 | 37.5 | -60.4 | 34.0 |
| 26.107 | 98.4 | 56.8 | 65.5 | 4.5 | 40.6 | -62.7 | 35.7 |
| 31.329 | 105.1 | 56.6 | 68.1 | 6.5 | 41.8 | -62.4 | 42.7 |
| 36.550 | 106.3 | 58.1 | 70.0 | 7.9 | 41.8 | -61.3 | 45.0 |
| 41.772 | 108.7 | 60.2 | 71.2 | 6.5 | 41.4 | -59.7 | 49.0 |
| 46.993 | 119.0 | 61.8 | 68.8 | 8.4 | 43.6 | -68.5 | 50.5 |
| 52.215 | 102.6 | 71.4 | 69.3 | 9.8 | 43.2 | -49.6 | 52.9 |
| 57.436 | 106.2 | 65.8 | 67.5 | 8.5 | 38.7 | -49.1 | 57.1 |
| 62.658 | 109.9 | 68.9 | 70.8 | 13.6 | 45.0 | -48.9 | 61.1 |
| 67.879 | 112.3 | 68.9 | 71.5 | 13.5 | 45.0 | -48.5 | 63.9 |
| 73.101 | 112.4 | 71.2 | 77.7 | 15.8 | 45.6 | -44.2 | 68.2 |
| 78.322 | 118.8 | 79.4 | 78.7 | 18.8 | 47.4 | -46.4 | 72.4 |
| 83.544 | 126.0 | 81.9 | 79.2 | 17.0 | 45.8 | -48.2 | 77.8 |
| 88.765 | 133.5 | 81.9 | 79.5 | 24.6 | 48.7 | -51.0 | 82.5 |
| 93.987 | 128.6 | 82.0 | 81.1 | 23.5 | 46.5 | -42.5 | 86.1 |
| 99.208 | 133.9 | 90.8 | 84.5 | 29.0 | 48.9 | -42.8 | 91.2 |
| 104.430 | 137.4 | 68.5 | 85.8 | 34.5 | 49.8 | -42.1 | 95.3 |
| 109.651 | 142.2 | 90.3 | 88.7 | 35.5 | 50.8 | -40.9 | 101.2 |
| 114.873 | 155.3 | 74.8 | 88.4 | 54.7 | 52.8 | -48.2 | 107.1 |

DIRT MISSION CODE AA
TEST E7, 14 OCT 1978
CAMERA STATION 1327
MERGED CLOUD

PAGE C 72

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID | | STEM LEFT (M) | EDGE RT (M) |
|---------------|----------------------|-----------------------|---------------------------------|-------------------|-------|---------------------|-------------------|
| | | | | X (M) | Z (M) | | |
| 0.0 | 28.8 | 30.3 | 6.0 | 1.0 | 2.4 | -14.4 | 14.4 |
| 5.213 | 52.5 | 37.8 | 31.9 | 1.5 | 16.6 | -24.0 | 28.5 |
| 10.426 | 59.1 | 39.4 | 41.3 | -0.4 | 20.7 | -32.2 | 26.9 |
| 15.640 | 66.9 | 43.7 | 48.2 | -5.8 | 25.4 | -40.0 | 26.9 |
| 20.853 | 72.4 | 46.1 | 47.4 | -8.6 | 23.4 | -47.7 | 24.7 |
| 26.066 | 79.8 | 53.6 | 51.0 | -9.0 | 23.4 | -54.8 | 25.1 |
| 31.279 | 87.0 | 54.0 | 53.0 | -9.2 | 24.7 | -63.0 | 24.0 |
| 36.492 | 95.2 | 53.6 | 54.9 | -9.1 | 26.8 | -72.2 | 23.0 |
| 41.705 | 102.1 | 54.6 | 55.4 | -13.3 | 25.5 | -79.8 | 22.3 |
| 46.919 | 110.7 | 61.0 | 55.4 | -16.0 | 27.2 | -88.5 | 22.2 |
| 52.132 | 118.0 | 58.1 | 57.5 | -17.9 | 29.0 | -96.5 | 21.5 |
| 57.345 | 124.3 | 60.2 | 60.0 | -17.9 | 35.2 | -105.1 | 19.2 |
| 62.558 | 128.5 | 64.2 | 60.5 | -19.5 | 37.4 | -111.7 | 16.8 |
| 67.771 | 134.6 | 66.9 | 64.7 | -14.2 | 48.5 | -117.3 | 17.3 |
| 72.985 | 140.9 | 69.9 | 67.7 | -18.7 | 47.4 | -123.4 | 17.5 |
| 78.198 | 147.8 | 69.0 | 69.3 | -19.3 | 48.8 | -130.8 | 16.9 |
| 83.411 | 157.3 | 69.2 | 70.4 | -16.8 | 48.3 | -140.3 | 16.9 |
| 88.624 | 162.9 | 82.8 | 76.3 | -13.5 | 49.9 | -146.0 | 16.8 |
| 93.837 | 170.2 | 82.0 | 74.0 | -18.1 | 50.5 | -153.3 | 16.9 |
| 99.051 | 174.8 | 111.5 | 74.8 | -6.4 | 50.2 | -157.4 | 17.3 |

DIRT MISSION CODE AA
TEST E8, 14 OCT 1978
CAMERA STATION 1327
DEVELOPING CLOUD

PAGE C 73

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) |
|---------------|-------------------|--------------------|------------------------|-------------------------|-------------------------|
| 0.0 | C1 | 7.1 | 8.0 | 4.5 | -9.5 |
| 0.0 | C2 | 6.0 | 7.5 | 5.6 | 0.2 |
| 0.0 | C3 | 7.5 | 7.9 | 5.4 | 8.9 |
| | | | | 2.6 | 2.9 |

DIRT MISSION CODE AA
 TEST F8, 14 OCT 1978
 CAMERA STATION 1327
 MERGED CLOUD

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID | | | STEM EDGE LEFT (M) | STEM EDGE RT (M) |
|---------------|-------------------|--------------------|------------------------|----------------|-------|--------|-----------------------|---------------------|
| | | | | X (M) | Y (M) | Z (M) | | |
| 0.104 | 29.9 | 32.6 | 8.5 | 0.9 | 4.9 | -16.4 | 13.5 | |
| 5.312 | 52.9 | 49.7 | 27.6 | 2.7 | 15.2 | -29.3 | 23.6 | |
| 10.521 | 53.7 | 47.7 | 31.1 | -0.8 | 17.6 | -34.3 | 19.5 | |
| 15.729 | 56.1 | 46.4 | 37.4 | -0.5 | 21.2 | -35.7 | 20.4 | |
| 20.937 | 58.9 | 44.4 | 41.4 | -1.4 | 20.6 | -38.0 | 20.9 | |
| 26.146 | 67.5 | 46.5 | 44.2 | -3.6 | 25.8 | -46.0 | 21.6 | |
| 31.354 | 71.9 | 49.6 | 46.2 | -5.2 | 23.0 | -4.9.2 | 22.7 | |
| 36.562 | 73.5 | 46.1 | 48.5 | -5.6 | 26.1 | -54.3 | 19.3 | |
| 41.771 | 76.0 | 46.1 | 54.9 | -8.9 | 28.2 | -58.9 | 17.0 | |
| 46.979 | 81.2 | 51.3 | 53.7 | -10.3 | 29.9 | -64.3 | 16.9 | |
| 52.187 | 85.2 | 48.6 | 57.2 | -13.6 | 32.9 | -69.8 | 15.4 | |
| 57.396 | 89.6 | 51.2 | 59.6 | -15.8 | 33.0 | -75.6 | 14.0 | |
| 62.604 | 91.3 | 55.5 | 62.2 | -21.4 | 34.8 | -81.8 | 9.5 | |
| 67.912 | 94.5 | 54.6 | 63.7 | -20.3 | 36.7 | -87.2 | 7.4 | |
| 73.021 | 99.2 | 61.4 | 64.9 | -19.7 | 40.4 | -92.5 | 6.7 | |
| 78.229 | 99.1 | 62.9 | 67.4 | -21.8 | 41.4 | -96.7 | 2.4 | |
| 83.437 | 100.5 | 65.0 | 71.0 | -23.2 | 43.5 | -101.0 | -0.5 | |
| 88.645 | 100.1 | 69.5 | 70.3 | -25.1 | 40.3 | -106.0 | -5.9 | |
| 93.854 | 103.4 | 71.4 | 70.3 | -30.2 | 41.6 | -113.2 | -9.8 | |
| 98.062 | 99.2 | 78.9 | 71.8 | -32.9 | 42.8 | -111.9 | -12.7 | |
| 104.270 | 105.7 | 83.5 | 72.7 | -38.3 | 41.8 | -119.9 | -14.2 | |
| 109.479 | 98.3 | 84.7 | 74.6 | -41.7 | 42.0 | -111.2 | -12.9 | |
| 114.687 | 111.6 | 96.4 | 75.5 | -41.6 | 45.1 | -130.8 | -19.3 | |

AD-A076 337

NEW MEXICO STATE UNIV LAS CRUCES PHYSICAL SCIENCE LAB F/G 19/4
FIXED CAMERA DATA DUSTY INFRARED TEST-I (DIRT-I) 2 OCTOBER THRO--ETC(U)
AUG 79 DAAD07-79-C-0008

UNCLASSIFIED

NMSW/PSL/FDR-37179

ERADCOM/ASL-CR-79-0008-1 NL

2 OF 3
ADA
076337



DIRT MISSION CODE AA
TEST E9, 14 OCT 1978
CAMERA STATION 1327
DEVELOPING CLOUD

PAGE C 75

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) |
|---------------|-------------------|--------------------|------------------------|-------------------------|-------------------------|
| 0.0 | C1 | 3.8 | 4.1 | 2.2 | -9.3 |
| 0.0 | C2 | 5.3 | 4.7 | 2.9 | 0.6 |
| 0.0 | C3 | 6.9 | 6.4 | 3.3 | -0.9 |
| 0.104 | C1 | 13.4 | 6.7 | 4.3 | 11.0 |
| 0.104 | C2 | 7.0 | 7.9 | 5.5 | 1.0 |
| 0.104 | C3 | 4.5 | 4.5 | 3.9 | -9.1 |
| | | | | 2.8 | 2.2 |
| | | | | 11.4 | 2.6 |

DIRT MISSION CODE AA
 TEST F9, 14 OCT 1978
 CAMERA STATION 1327
 MERGED CLOUD

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) | STEM LEFT (M) | STEM RT (M) | EDGE LEFT (M) | EDGE RT (M) |
|---------------|-------------------|--------------------|------------------------|-------------------------|-------------------------|---------------|-------------|---------------|-------------|
| 0.208 | 30.6 | 27.0 | 5.4 | -3.5 | 3.0 | -17.8 | 12.8 | -80.7 | 34.4 |
| 5.410 | 115.1 | 30.9 | 15.9 | 8.6 | 9.9 | -79.8 | 31.8 | -79.8 | 31.8 |
| 10.611 | 111.7 | 31.8 | 25.3 | 6.4 | 16.8 | -80.7 | 31.4 | -80.7 | 31.4 |
| 15.813 | 112.1 | 36.5 | 35.8 | 6.8 | 21.0 | -77.2 | 32.8 | -77.2 | 32.8 |
| 21.015 | 110.0 | 36.6 | 41.8 | 5.2 | 26.7 | -73.5 | 33.7 | -73.5 | 33.7 |
| 26.216 | 107.2 | 41.4 | 51.1 | 3.9 | 33.1 | -74.6 | 34.3 | -74.6 | 34.3 |
| 31.418 | 108.9 | 39.0 | 58.6 | 4.0 | 42.0 | -69.7 | 34.8 | -69.7 | 34.8 |
| 36.619 | 104.5 | 41.7 | 67.1 | 2.9 | 48.3 | -73.3 | 36.2 | -73.3 | 36.2 |
| 41.821 | 109.4 | 44.8 | 75.1 | -0.1 | 55.4 | -70.8 | 35.7 | -70.8 | 35.7 |
| 47.023 | 106.5 | 48.5 | 80.0 | -0.6 | 60.8 | -71.6 | 35.1 | -71.6 | 35.1 |
| 52.224 | 106.7 | 59.6 | 90.8 | -3.1 | 67.2 | -66.9 | 36.6 | -66.9 | 36.6 |
| 57.426 | 103.4 | 59.1 | 96.4 | -6.0 | 72.1 | -69.1 | 33.6 | -69.1 | 33.6 |
| 62.628 | 102.7 | 62.0 | 100.9 | -10.3 | 77.0 | -75.3 | 33.5 | -75.3 | 33.5 |
| 67.829 | 108.8 | 63.0 | 99.2 | -13.2 | 79.5 | -72.8 | 34.3 | -72.8 | 34.3 |
| 73.031 | 107.0 | 60.7 | 111.8 | -18.0 | 86.0 | -70.4 | 37.2 | -70.4 | 37.2 |
| 78.232 | 107.5 | 57.7 | 112.3 | -23.7 | 89.4 | -55.8 | 38.1 | -55.8 | 38.1 |
| 83.434 | 94.0 | 63.6 | 115.7 | -27.1 | 92.7 | -62.9 | 44.6 | -62.9 | 44.6 |
| 88.636 | 107.5 | 66.5 | 121.2 | -28.0 | 96.3 | -70.4 | 41.7 | -70.4 | 41.7 |
| 93.837 | 112.1 | 71.5 | 126.0 | -30.3 | 98.8 | -77.5 | 43.4 | -77.5 | 43.4 |
| 99.039 | 120.9 | 68.8 | 128.9 | -34.0 | 101.4 | -95.0 | 48.0 | -95.0 | 48.0 |
| 104.241 | 143.0 | 70.4 | 130.2 | -35.6 | 105.8 | -88.0 | 51.7 | -88.0 | 51.7 |
| 109.442 | 139.6 | 73.3 | 138.0 | -41.5 | 107.2 | -83.5 | 51.8 | -83.5 | 51.8 |
| 114.644 | 135.3 | 93.5 | 140.1 | -40.3 | 102.1 | | | | |

DIRT MISSION CODE AA
TEST F10, 14 OCT 1978
CAMERA STATION 1327
DEVELOPING CLOUD

PAGE C 77

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID | |
|---------------|----------------------|-----------------------|------------------------------|----------------|-------|
| | | | | X (M) | Z (M) |
| 0.0 | C1 | 5.3 | 5.4 | 1.5 | -7.6 |
| 0.0 | C2 | 6.4 | 5.9 | 2.1 | 0.7 |
| 0.0 | C3 | 9.9 | 6.1 | 2.5 | 1.2 |
| 0.104 | C1 | 7.2 | 7.2 | 1.7 | 10.1 |
| 0.104 | C2 | 7.5 | 6.9 | 3.5 | -9.2 |
| 0.104 | C3 | 8.3 | 8.4 | 3.2 | 0.8 |
| 0.208 | C1 | 8.1 | 8.0 | 3.3 | 0.3 |
| 0.208 | C2 | 7.0 | 7.4 | 4.5 | -0.7 |
| 0.208 | C3 | 7.0 | 6.6 | 5.0 | 2.1 |
| 0.312 | C1 | 8.2 | 8.5 | 3.7 | 10.5 |
| 0.312 | C2 | 7.9 | 8.4 | 4.8 | -0.5 |
| 0.312 | C3 | 5.7 | 5.5 | 5.5 | 2.8 |

DIRT MISSION CODE AA
 TEST F10, 14 OCT 1978
 CAMERA STATION 1327
 MERGED CLOUD

PAGE C 78

| TIME (SFC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) | STEM LEFT (M) | EDGE RT (M) |
|---------------|-------------------|--------------------|------------------------|-------------------------|-------------------------|---------------|-------------|
| 0.416 | 28.5 | 27.2 | 5.1 | 0.7 | 2.7 | -15.3 | 13.3 |
| 5.613 | 67.2 | 28.8 | 12.6 | 0.2 | 6.6 | -26.2 | 40.9 |
| 10.810 | 83.7 | 32.2 | 23.4 | 11.1 | 12.6 | -29.3 | 54.4 |
| 16.008 | 89.5 | 37.2 | 31.1 | 12.8 | 14.6 | -31.4 | 58.2 |
| 21.205 | 98.1 | 43.0 | 37.2 | 13.1 | 19.5 | -30.7 | 67.4 |
| 26.402 | 105.5 | 48.4 | 44.7 | 14.7 | 23.5 | -28.0 | 77.5 |
| 31.599 | 104.7 | 49.4 | 50.6 | 17.6 | 29.5 | -26.9 | 77.8 |
| 36.797 | 110.8 | 52.9 | 57.0 | 20.2 | 33.5 | -25.4 | 85.4 |
| 41.994 | 112.9 | 58.2 | 62.0 | 23.6 | 37.0 | -22.9 | 90.0 |
| 47.191 | 120.3 | 59.8 | 68.2 | 27.7 | 44.7 | -23.0 | 97.3 |
| 52.388 | 128.3 | 61.7 | 69.9 | 28.3 | 43.8 | -23.5 | 104.8 |
| 57.586 | 135.0 | 55.8 | 75.6 | 32.3 | 52.5 | -26.9 | 108.1 |
| 62.783 | 144.0 | 56.6 | 74.9 | 37.9 | 54.7 | -29.0 | 115.0 |
| 67.980 | 147.0 | 57.3 | 82.1 | 39.3 | 58.9 | -29.6 | 117.4 |
| 73.177 | 148.1 | 54.7 | 87.9 | 43.2 | 62.5 | -28.4 | 119.7 |
| 78.375 | 154.3 | 65.8 | 88.9 | 43.2 | 67.2 | -26.7 | 127.5 |
| 83.572 | 147.0 | 70.1 | 92.8 | 48.3 | 73.5 | -29.7 | 117.3 |
| 88.769 | 167.8 | 64.9 | 96.5 | 52.8 | 78.4 | -38.8 | 129.0 |
| 93.966 | 172.1 | 76.4 | 99.4 | 56.1 | 79.8 | -39.8 | 132.3 |
| 99.164 | 173.7 | 87.2 | 100.9 | 55.0 | 83.1 | -46.0 | 127.7 |
| 104.361 | 167.0 | 105.1 | 101.0 | 53.4 | 83.0 | -32.8 | 134.2 |
| 109.558 | 183.0 | 104.6 | 106.4 | 51.0 | 83.1 | -55.8 | 127.2 |
| 114.755 | 208.2 | 106.7 | 109.2 | 53.6 | 85.9 | -69.9 | 138.4 |

DIRT MISSION CODE AR
 TEST F1, 12 OCT 1978
 CAMFRA STATION 1328
 ISOLATED BURST

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Y (M) | CLOUD CENTROID Z (M) | STEM LEFT (M) | EDGE LEFT (M) | STEM RIGHT (M) | EDGE RIGHT (M) |
|---------------|----------------------|-----------------------|------------------------|----------------------------|----------------------------|----------------------------|------------------|------------------|-------------------|-------------------|
| 0.686 | 5.7 | 7.8 | 4.6 | 119.9 | 2.3 | 116.6 | 122.3 | 117.9 | 123.8 | 117.5 |
| 0.784 | 5.9 | 8.0 | 5.4 | 121.5 | 3.5 | 117.5 | 123.8 | 117.7 | 125.1 | 117.7 |
| 0.882 | 7.4 | 7.1 | 7.0 | 121.2 | 3.8 | 118.6 | 125.5 | 118.6 | 125.5 | 118.6 |
| 0.980 | 6.9 | 7.4 | 7.7 | 122.3 | 4.7 | 119.4 | 125.9 | 119.4 | 126.5 | 119.4 |
| 1.078 | 6.5 | 8.2 | 7.9 | 122.7 | 4.5 | 117.8 | 126.5 | 117.8 | 127.1 | 117.8 |
| 1.176 | 8.7 | 7.9 | 8.9 | 122.7 | 5.2 | 117.3 | 127.1 | 117.3 | 127.1 | 117.3 |
| 1.274 | 9.8 | 9.9 | 8.7 | 122.0 | 4.8 | 117.2 | 127.2 | 117.2 | 127.2 | 117.2 |
| 1.372 | 10.0 | 10.6 | 10.0 | 122.7 | 5.2 | 117.5 | 127.3 | 117.5 | 127.3 | 117.5 |
| 1.470 | 9.8 | 11.1 | 10.1 | 122.3 | 5.3 | 117.5 | 127.4 | 117.5 | 127.4 | 117.5 |
| 1.568 | 9.9 | 12.0 | 10.2 | 122.4 | 5.5 | 118.9 | 128.0 | 118.9 | 128.0 | 118.9 |
| 1.666 | 9.1 | 10.8 | 10.3 | 123.8 | 5.7 | 117.8 | 128.2 | 117.8 | 128.2 | 117.8 |
| 1.764 | 10.3 | 11.9 | 10.5 | 123.9 | 6.1 | 118.1 | 128.1 | 118.1 | 128.1 | 118.1 |
| 1.862 | 9.9 | 12.8 | 9.8 | 124.2 | 5.9 | 117.5 | 127.4 | 117.5 | 127.4 | 117.5 |
| 1.960 | 10.4 | 12.7 | 10.8 | 123.1 | 5.7 | 117.9 | 128.3 | 117.9 | 128.3 | 117.9 |
| 2.058 | 11.8 | 16.0 | 11.3 | 123.6 | 6.4 | 116.8 | 128.6 | 116.8 | 128.6 | 116.8 |
| 2.156 | 15.6 | 18.8 | 11.4 | 121.5 | 5.7 | 113.1 | 128.6 | 113.1 | 128.6 | 113.1 |
| 2.254 | 18.8 | 20.3 | 11.3 | 123.0 | 5.5 | 110.2 | 129.0 | 110.2 | 129.0 | 110.2 |
| 2.352 | 18.8 | 20.1 | 10.7 | 121.9 | 6.4 | 110.3 | 129.1 | 110.3 | 129.1 | 110.3 |
| 2.450 | 18.7 | 20.4 | 12.1 | 121.3 | 5.8 | 110.8 | 129.5 | 110.8 | 129.5 | 110.8 |
| 2.548 | 19.0 | 21.3 | 11.3 | 122.4 | 5.4 | 110.3 | 129.4 | 110.3 | 129.4 | 110.3 |
| 2.646 | 19.7 | 20.0 | 11.5 | 122.9 | 5.8 | 110.2 | 129.8 | 110.2 | 129.8 | 110.2 |
| 2.744 | 19.6 | 21.2 | 11.6 | 121.8 | 6.0 | 110.2 | 129.8 | 110.2 | 129.8 | 110.2 |
| 2.842 | 20.5 | 21.4 | 11.4 | 122.8 | 5.9 | 109.6 | 130.1 | 109.6 | 130.1 | 109.6 |
| 2.940 | 21.1 | 21.2 | 12.3 | 123.0 | 6.4 | 108.8 | 129.9 | 108.8 | 129.9 | 108.8 |
| 3.038 | 20.9 | 22.7 | 12.2 | 123.0 | 5.8 | 109.6 | 130.5 | 109.6 | 130.5 | 109.6 |
| 3.136 | 21.7 | 22.5 | 12.7 | 123.2 | 5.6 | 108.8 | 130.5 | 108.8 | 130.5 | 108.8 |
| 3.234 | 20.7 | 20.7 | 13.4 | 122.9 | 5.7 | 110.0 | 130.7 | 110.0 | 130.7 | 110.0 |
| 3.332 | 21.6 | 21.8 | 12.8 | 122.2 | 6.0 | 109.3 | 130.9 | 109.3 | 130.9 | 109.3 |
| 3.430 | 21.3 | 21.6 | 12.8 | 120.7 | 5.5 | 109.6 | 130.9 | 109.6 | 130.9 | 109.6 |
| 3.528 | 21.5 | 21.5 | 13.7 | 122.2 | 5.7 | 110.1 | 131.1 | 110.1 | 131.1 | 110.1 |
| 3.626 | 20.7 | 23.0 | 13.4 | 123.7 | 6.3 | 107.9 | 130.9 | 107.9 | 130.9 | 107.9 |

DIRT MISSION CODE AB
 TEST F1 12 OCT 1978
 CAMERA STATION 1328
 ISOLATED BURST

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) | STEM LEFT (M) | STEM RT (M) | EDGE |
|---------------|-------------------|--------------------|------------------------|-------------------------|-------------------------|---------------|-------------|------|
| 0.685 | 4.5 | 7.0 | 4.3 | 118.3 | 2.3 | 116.1 | 120.6 | |
| 5.581 | 24.6 | 23.9 | 15.4 | 121.1 | 6.5 | 108.3 | 132.8 | |
| 10.477 | 29.5 | 27.2 | 20.2 | 123.0 | 9.8 | 108.4 | 137.9 | |
| 15.373 | 31.6 | 29.5 | 27.7 | 124.2 | 11.5 | 107.1 | 138.7 | |
| 20.269 | 31.3 | 32.1 | 35.2 | 126.6 | 15.7 | 107.3 | 138.7 | |
| 25.165 | 31.7 | 32.3 | 36.8 | 133.4 | 16.5 | 108.3 | 140.0 | |
| 30.061 | 29.9 | 32.8 | 43.6 | 132.2 | 18.5 | 110.4 | 140.3 | |
| 34.957 | 31.9 | 33.8 | 48.9 | 134.0 | 20.0 | 111.2 | 143.1 | |
| 39.853 | 36.2 | 35.9 | 55.5 | 134.0 | 26.7 | 111.4 | 147.6 | |
| 44.749 | 36.7 | 33.8 | 58.9 | 133.8 | 30.7 | 113.5 | 150.2 | |
| 49.645 | 34.4 | 34.5 | 64.2 | 137.1 | 30.3 | 116.8 | 151.2 | |
| 54.541 | 33.4 | 46.4 | 76.0 | 140.4 | 30.0 | 121.8 | 155.2 | |
| 59.437 | 39.7 | 48.8 | 82.5 | 141.6 | 42.0 | 119.9 | 159.6 | |

DIRT MISSION CODE AB
 TEST F2, 12 OCT 1978
 CAMERA STATION 1328
 ISOLATED BURST

PAGE C 81

| TIME (SFC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID | | | STEM EDGE LEFT (M) | STEM EDGE RT (M) |
|---------------|-------------------|--------------------|------------------------|----------------|-------|-------|-----------------------|---------------------|
| | | | | X (M) | Z (M) | Y (M) | | |
| 0.392 | 4.8 | 8.7 | 4.0 | 91.6 | 2.1 | 79.1 | 83.9 | |
| 0.490 | 7.8 | 9.7 | 4.7 | 90.7 | 2.3 | 77.0 | 84.8 | |
| 0.588 | 8.6 | 10.4 | 5.3 | 80.3 | 2.2 | 76.7 | 85.3 | |
| 0.686 | 11.2 | 14.2 | 5.1 | 80.7 | 2.5 | 74.7 | 85.9 | |
| 0.783 | 13.2 | 15.6 | 5.1 | 80.7 | 2.2 | 74.0 | 87.2 | |
| 0.881 | 19.5 | 21.3 | 4.9 | 94.6 | 2.0 | 74.3 | 93.8 | |
| 0.979 | 20.6 | 22.4 | 5.7 | 82.8 | 2.8 | 73.8 | 94.4 | |
| 1.077 | 19.4 | 21.5 | 5.6 | 82.7 | 2.8 | 75.3 | 94.7 | |
| 1.175 | 20.7 | 23.1 | 6.8 | 82.5 | 2.8 | 74.4 | 95.2 | |
| 1.273 | 23.1 | 21.8 | 6.6 | 84.8 | 3.0 | 72.0 | 95.1 | |
| 1.371 | 22.6 | 23.8 | 6.6 | 85.7 | 2.6 | 72.6 | 95.2 | |
| 1.469 | 24.8 | 25.2 | 6.6 | 84.8 | 3.1 | 69.7 | 94.4 | |
| 1.567 | 20.3 | 26.1 | 6.8 | 84.7 | 3.9 | 73.7 | 94.0 | |
| 1.665 | 18.7 | 19.5 | 7.2 | 85.6 | 3.8 | 76.1 | 94.8 | |
| 1.763 | 18.8 | 18.9 | 7.3 | 85.3 | 3.9 | 76.9 | 95.7 | |
| 1.861 | 17.5 | 17.7 | 8.2 | 84.6 | 3.8 | 77.1 | 94.6 | |
| 1.959 | 19.8 | 22.1 | 8.8 | 84.6 | 4.8 | 75.3 | 95.1 | |
| 2.057 | 16.4 | 18.6 | 8.8 | 85.7 | 4.5 | 79.8 | 95.2 | |
| 2.155 | 18.6 | 20.3 | 8.9 | 85.8 | 4.7 | 76.8 | 95.3 | |
| 2.253 | 19.7 | 21.7 | 9.2 | 85.9 | 4.7 | 75.9 | 95.6 | |
| 2.350 | 19.7 | 19.4 | 8.7 | 86.0 | 4.3 | 76.0 | 95.7 | |
| 2.448 | 19.0 | 19.0 | 10.0 | 85.4 | 5.1 | 76.7 | 95.7 | |
| 2.546 | 21.3 | 19.6 | 9.8 | 86.3 | 4.7 | 74.1 | 95.3 | |
| 2.644 | 19.4 | 18.6 | 10.8 | 95.7 | 4.5 | 76.3 | 95.7 | |
| 2.742 | 17.6 | 20.8 | 10.7 | 85.8 | 5.8 | 77.2 | 94.8 | |
| 2.840 | 23.3 | 20.7 | 10.1 | 95.7 | 5.1 | 72.7 | 95.9 | |
| 2.938 | 22.7 | 21.0 | 10.4 | 85.3 | 6.2 | 72.1 | 94.8 | |
| 3.036 | 19.8 | 24.1 | 10.6 | 84.4 | 5.6 | 74.6 | 94.4 | |
| 3.134 | 21.3 | 23.3 | 10.6 | 84.9 | 5.5 | 74.3 | 95.6 | |
| 3.232 | 22.4 | 23.7 | 11.9 | 84.8 | 5.1 | 72.8 | 95.2 | |
| 3.330 | 23.6 | 21.7 | 11.8 | 85.0 | 5.4 | 71.5 | 95.2 | |

DIRT MISSION CODE A8
TEST F2, 12 OCT 1978
CAMERA STATION 1328
ISOLATED BURST

PAGE C 82

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID X (M) | CLOUD CENTROID Z (M) | LEFT (M) | STEM EDGE RT (M) |
|---------------|-------------------|--------------------|------------------------|-------------------------|-------------------------|----------|---------------------|
| 0.979 | 17.2 | 25.0 | 5.2 | 82.8 | 2.3 | 76.9 | 94.0 |
| 5.872 | 23.0 | 17.9 | 17.2 | 84.7 | 7.9 | 70.8 | 93.8 |
| 10.765 | 27.3 | 25.1 | 24.7 | 81.2 | 12.9 | 68.0 | 95.3 |
| 15.658 | 30.4 | 28.0 | 33.1 | 80.3 | 15.5 | 67.2 | 97.6 |

DIRT MISSION CODE AB
TEST F4-12 OCT 1978
CAMERA STATION 1326
ISOLATED PURST

PAGE C 83

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID | | STEM EDGE LEFT (M) | STEM EDGE RT (M) |
|---------------|----------------------|-----------------------|------------------------|----------------|-------|--------------------------|------------------------|
| | | | | X (M) | Z (M) | | |
| 0.289 | 33.3 | 26.6 | 4.3 | -84.7 | 1.7 | -103.4 | -70.2 |
| 5.109 | 47.1 | 39.2 | 12.4 | -78.4 | 4.6 | -98.2 | -51.1 |
| 9.929 | 54.9 | 45.1 | 18.3 | -63.8 | 8.5 | -94.1 | -39.2 |

DIRT MISSION CODE FB
 TEST FB, 13 OCT 1978
 CAMERA STATION 1326
 ISOLATED BURST

| TIME (SEC) | STEM WIDTH (M) | CLOUD WIDTH (M) | HT AT CLOUD TOP (M) | CLOUD CENTROID | | STEM LEFT (M) | EDGE RT (M) |
|---------------|-------------------|--------------------|------------------------|----------------|-------|---------------|-------------|
| | | | | X (M) | Z (M) | | |
| 1.064 | 20.6 | 20.7 | 5.1 | 90.5 | 2.1 | 79.5 | 100.2 |
| 5.900 | 13.9 | 14.8 | 13.3 | 97.6 | 7.6 | 94.6 | 108.6 |
| 10.737 | 18.6 | 18.7 | 16.8 | 96.4 | 8.8 | 88.6 | 107.2 |
| 15.573 | 17.5 | 24.8 | 30.2 | 89.6 | 19.5 | 89.3 | 106.8 |
| 20.410 | 16.5 | 28.8 | 33.8 | 87.2 | 22.7 | 88.2 | 104.7 |
| 25.246 | 15.8 | 35.2 | 47.2 | 82.9 | 25.5 | 88.4 | 104.1 |
| 30.083 | 20.5 | 32.2 | 60.0 | 81.6 | 38.3 | 82.1 | 102.6 |
| 34.919 | 28.6 | 39.9 | 59.7 | 80.7 | 40.3 | 76.4 | 105.0 |
| 39.756 | 23.9 | 39.9 | 68.2 | 78.1 | 46.7 | 77.3 | 101.2 |
| 44.592 | 26.9 | 44.6 | 74.0 | 73.6 | 48.9 | 72.9 | 99.8 |
| 49.428 | 29.0 | 46.0 | 82.3 | 71.7 | 55.3 | 72.0 | 101.0 |
| 54.265 | 20.4 | 49.7 | 92.2 | 74.7 | 60.6 | 75.5 | 95.9 |
| 59.101 | 24.8 | 51.3 | 98.0 | 60.4 | 68.5 | 71.8 | 96.6 |
| 63.938 | 26.8 | 59.7 | 104.8 | 68.0 | 73.7 | 68.4 | 95.2 |

REDUCTION PROCEDURES

D. SMOKE FROM FIRE TESTS

Up to five frames from each G event film record were selected to illustrate growth of the smoke cloud. Prints of these frames are presented together with corresponding graphs of major smoke area outlines. Graphs were scaled from film measurements by application of Eq. (1). Comparison of a point with its outline graph allows easy scaling of other smoke areas or points, if desired.

EVENT G-1

TABLE IV

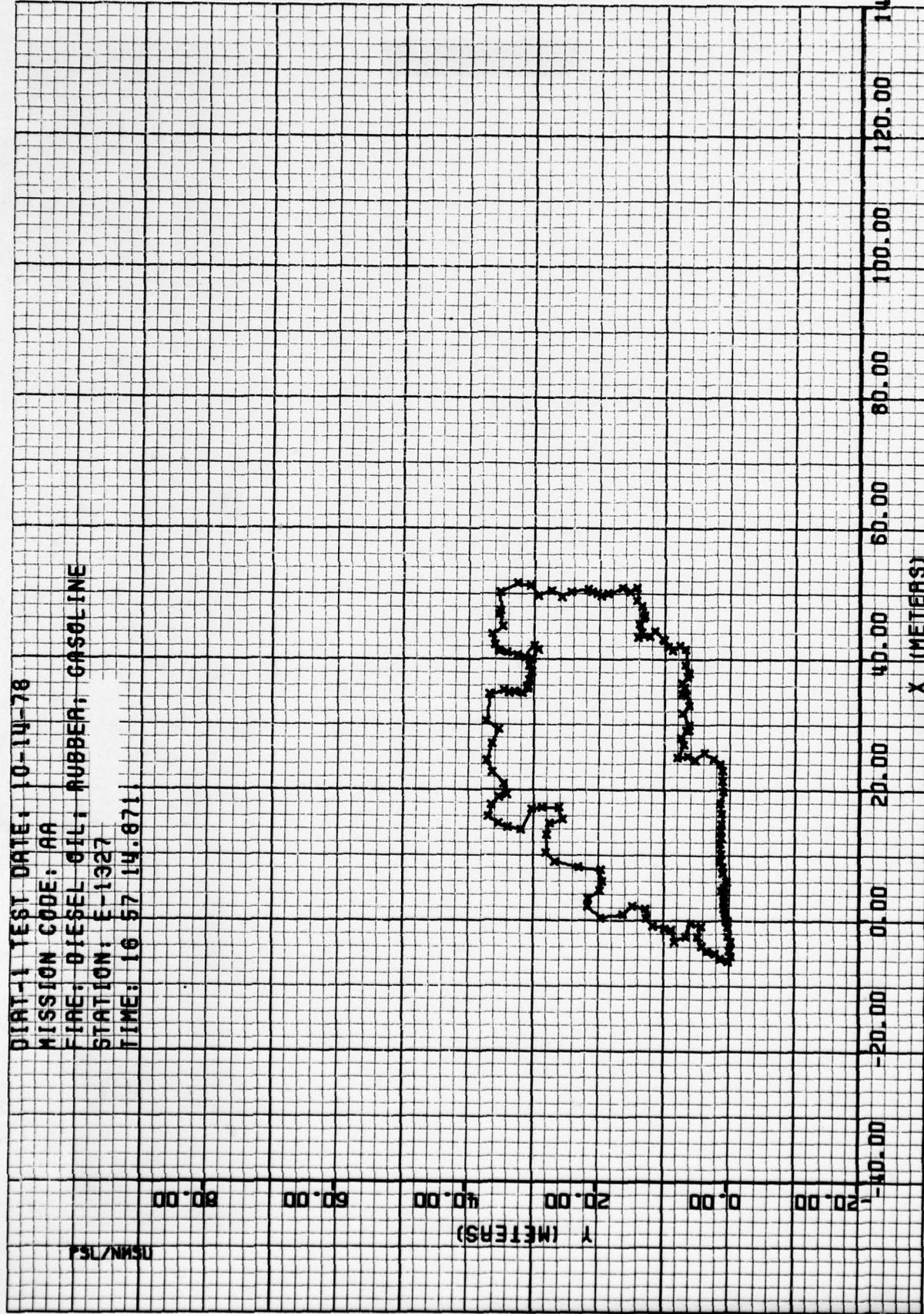
INDEX OF FIRE TEST DATA
SMOKE CLOUD PHOTOGRAPHS & PLOTS

| <u>TIME (GMT)</u> | <u>CAMERA STATION</u> | <u>PAGE</u> |
|-------------------|--------------------------------------|----------------------------|
| 1656. | E-1327 E-1328 | D 1 - D 6 D 7 - D 12 |
| 1705:30 | E-1327 E-1328 | D 13 - D 20 D 21 - D 28 |
| 1708:50 | E-1327 E-1328 | D 29 - D 34 D 35 - D 38 |
| 1711:05 | E-1327 E-1328 | D 39 - D 42 D 43 - D 48 |
| 1713:55 | E-1327 E-1328 | D 49 - D 52 D 53 - D 58 |
| 1716:40 | E-1327 E-1328 | D 59 - D 62 D 63 - D 68 |
| 1719. | E-1327 | D 69 - D 72 |
| 1722:55 | E-1327 E-1328 | D 73 - D 76 D 77 - D 86 |
| 1725:15 | E-1327 E-1328 | D 87 - D 90 D 91 - D 94 |
| 1727:15 | E-1327 E-1328 | D 95 - D 98 D 99 - D104 |
| 1729:35 | E-1327 E-1328 | D105 - D108 D109 - D114 |
| 1732:45 | E-1327 E-1328 | D115 - D118 D119 - D124 |

DIRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E-327
TIME: 16 h, 52 m, 14.871 s

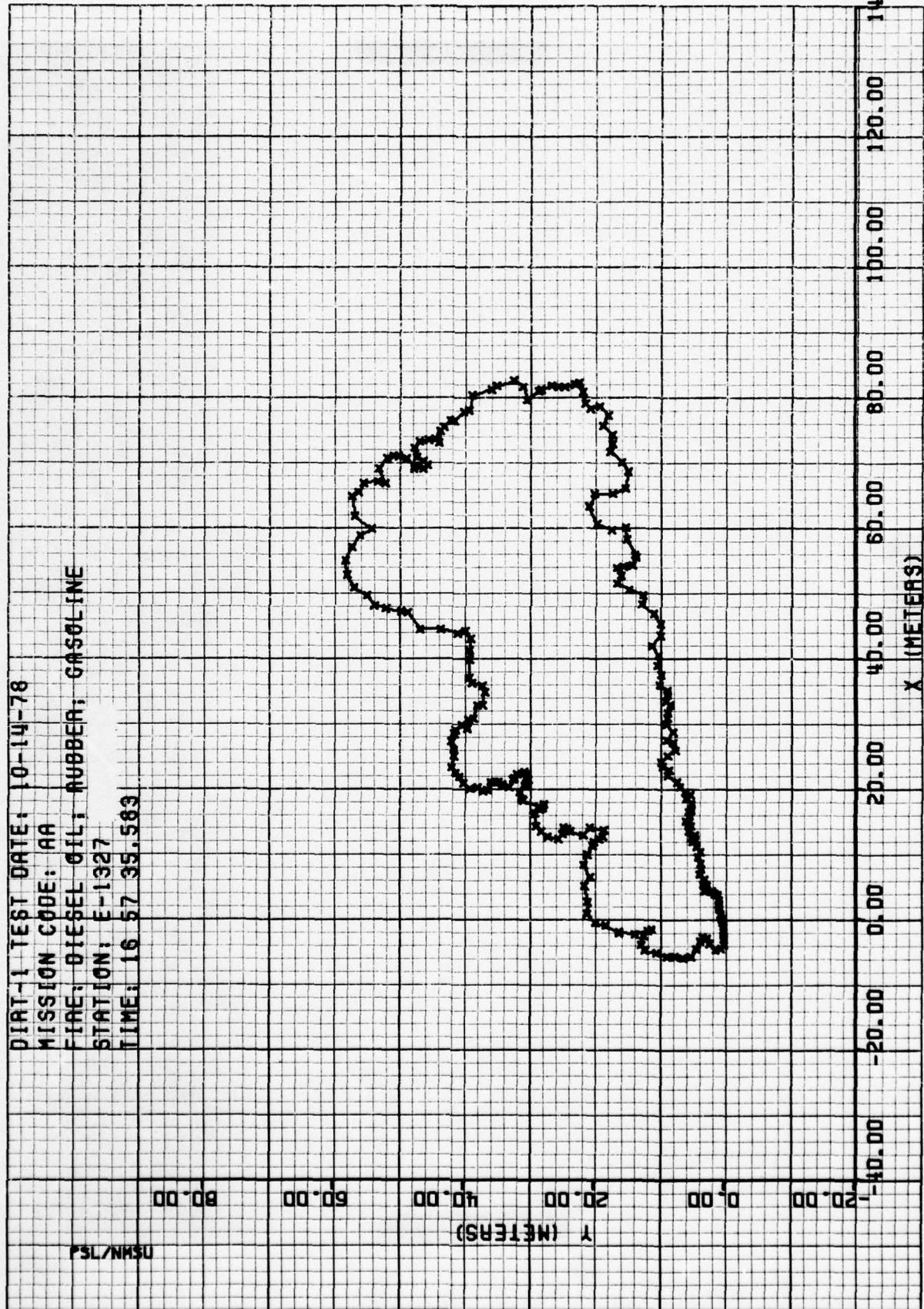
page D 1

PIAT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL 9 fl; RUBBER, GASOLINE
STATION: E-1327
TIME: 16 57 14.071



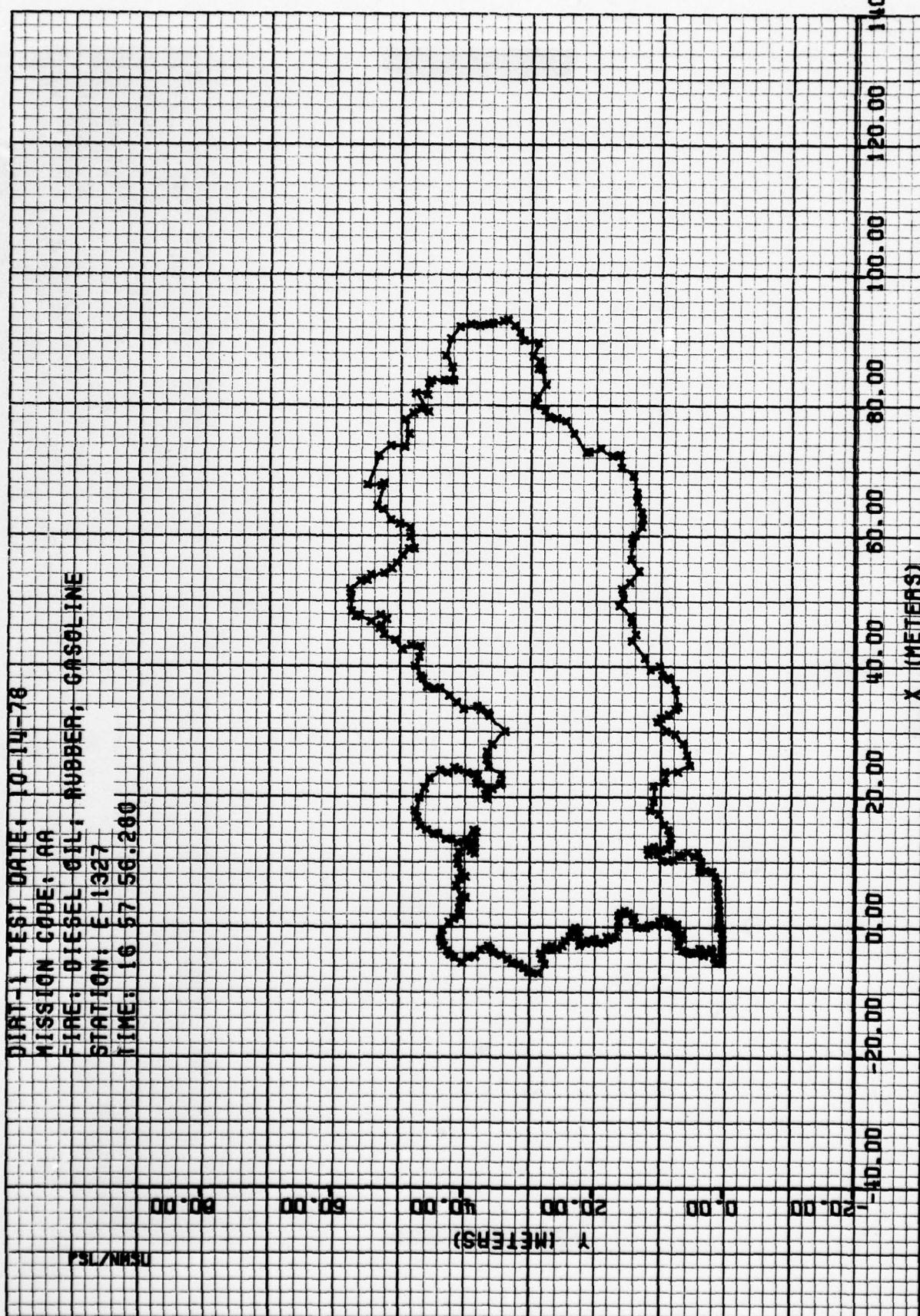
DIRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E-1327
TIME: 16 h, 57 m. 34 s

DIRT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL; RUBBER; GASOLINE
STATION: E-1327
TIME: 16 57 35.583



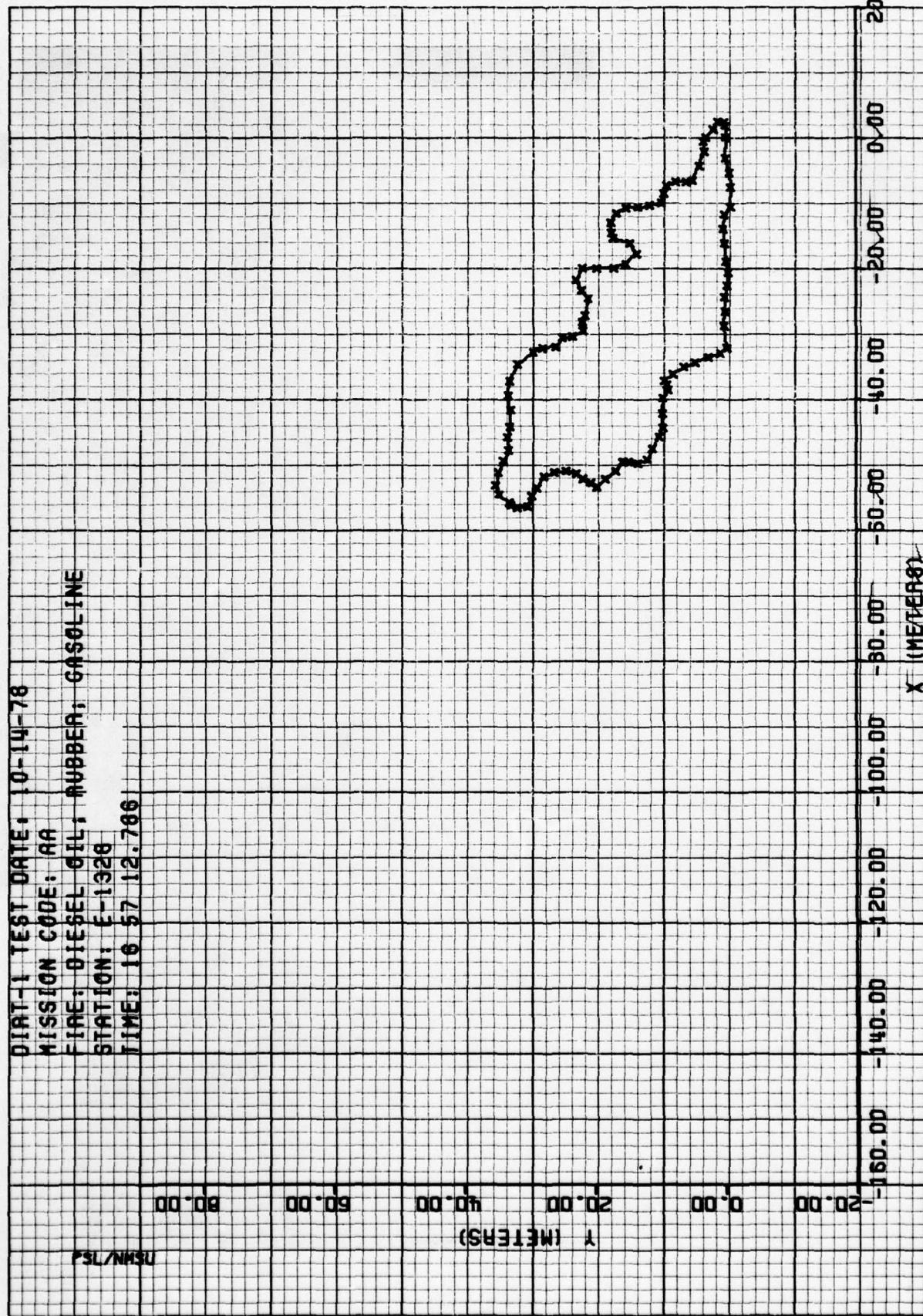
DIRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E- / 327
TIME: 16 h, 57 m, 56.280 s

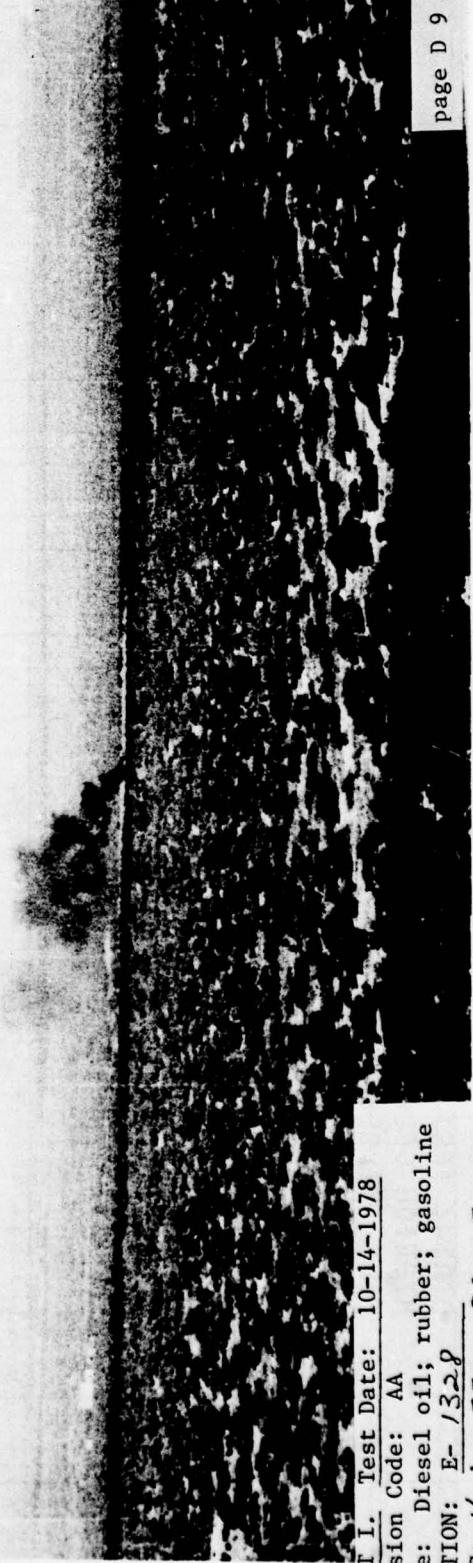
DATE-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL: RUBBER, GASOLINE
STATION: E-1327
TIME: 16 57 56.290



DIRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E-1328
TIME: 16 h, 57 m, 12.786 s

DIRT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL: RUBBER, GASOLINE
STATION: E-1328
TIME: 10 57 12.786

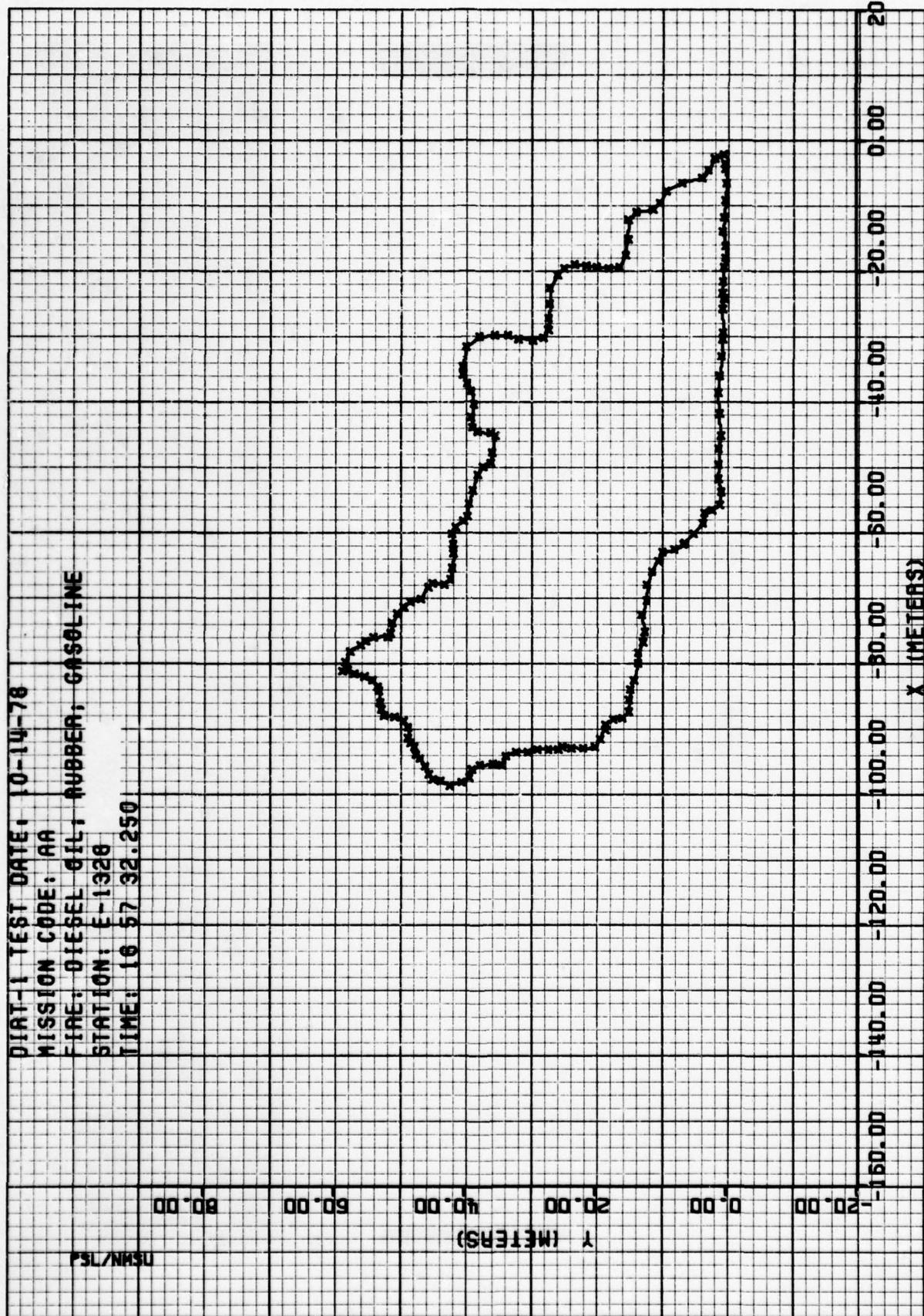




page D 9

DIRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E- 1320
TIME: 16 h, 57 m, 32.250 s

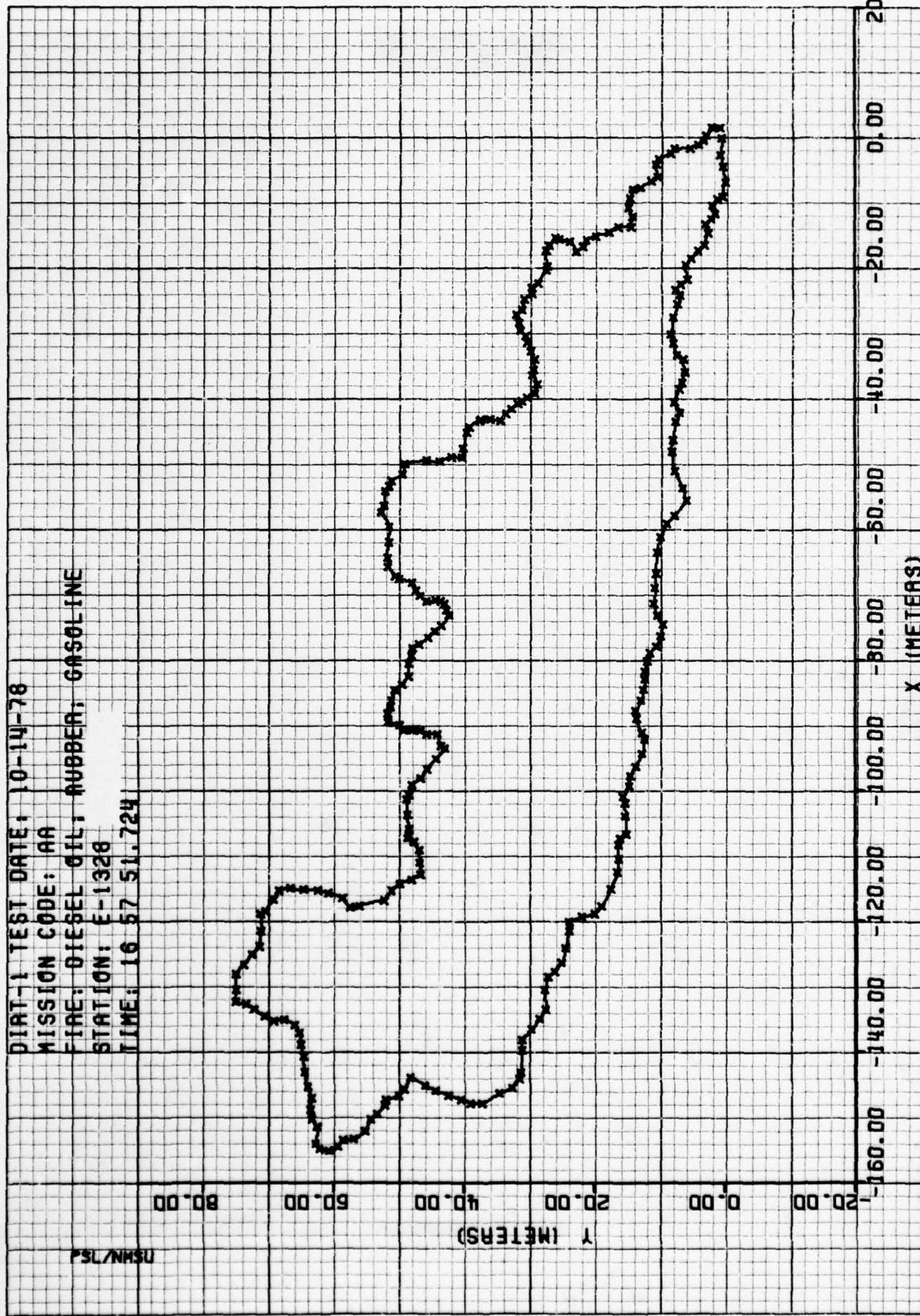
DATA-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL, RUBBER, GASOLINE
STATION: E-1328
TIME: 10 57 32.250



PSL/NMSU

DIRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E-1328
TIME: 16 h, 57 m, 51.724 s

DIRT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL, RUBBER, GASOLINE
STATION: E-1328
TIME: 16 57 51.724

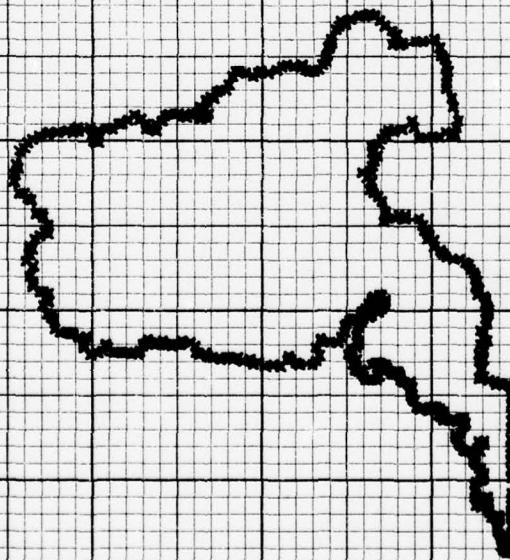


PSL/NMSU

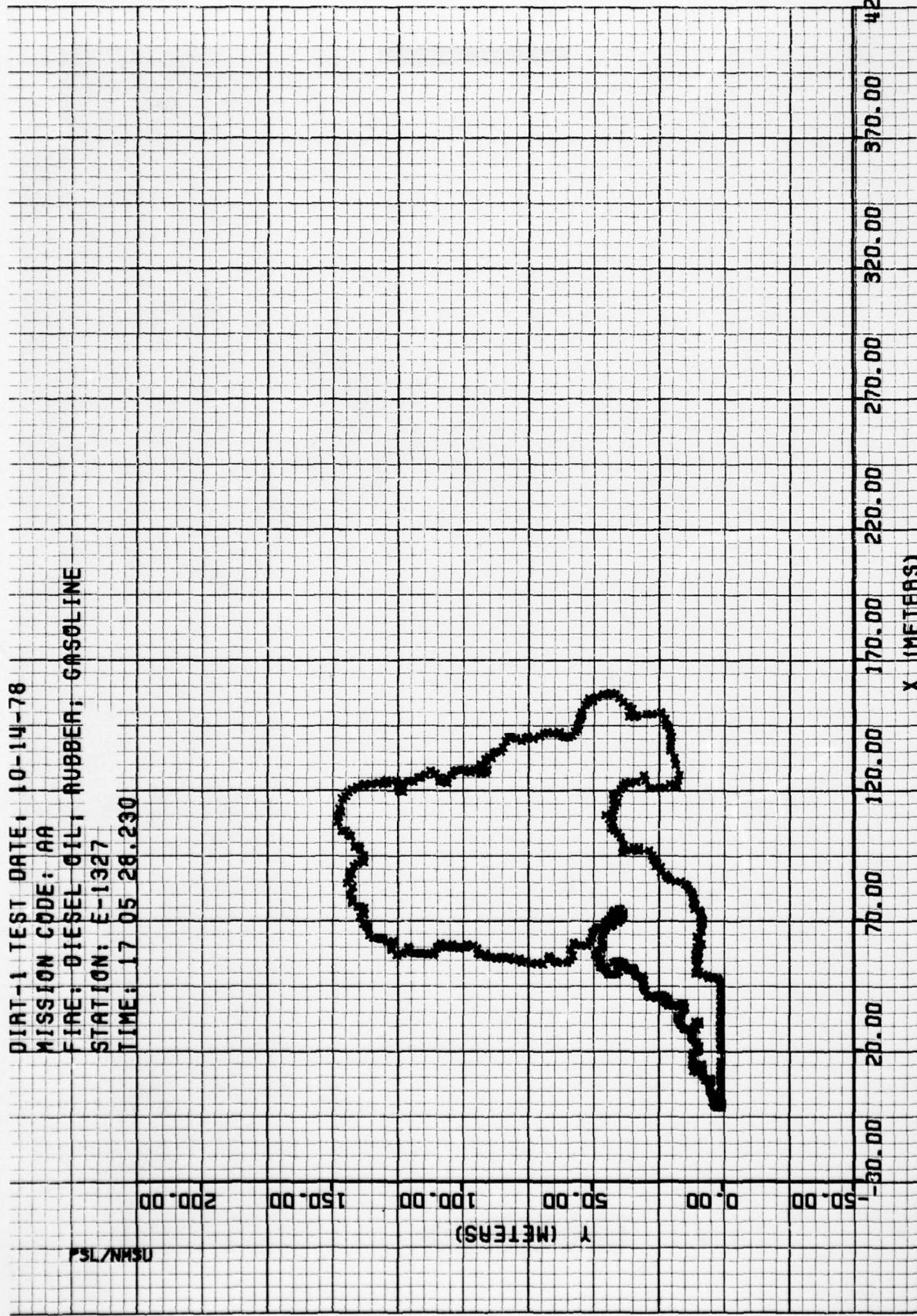
TEST I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E-1327
TIME: 17 h, 05 m, 28.230 s

PIRT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL, RUBBER, GASOLINE
STATION: E-1327
TIME: 17 05 28.230

PSL/NMSU



Y (METERS)



DIRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E- / 327
TIME: 17 h, 05 m, 48.939 s

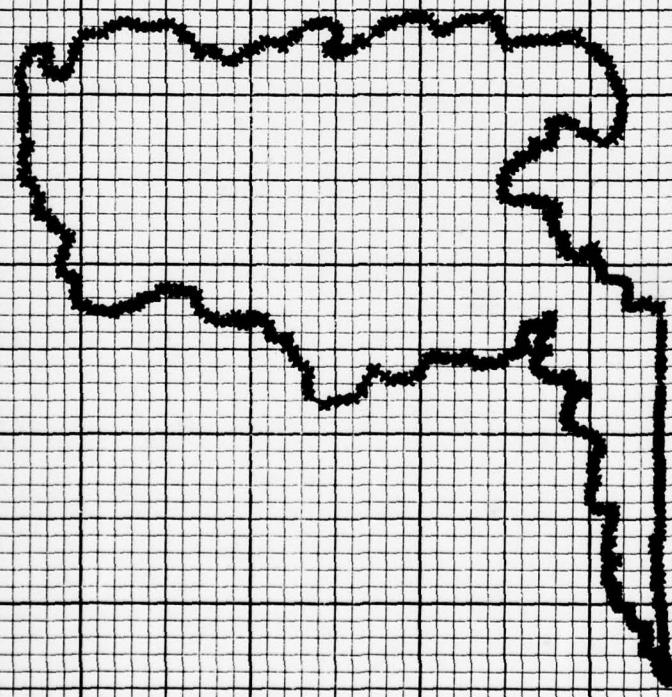
DIRT-1 TEST DATE: 10-14-78

MISSION CODE: AA

FARE: DIESEL OIL: RUBBER, GASOLINE

STATION: E-1327

TIME: 17 05 48.939



-50.00 0.00 50.00 100.00 150.00 200.00

-50.00 0.00 50.00 100.00 150.00 200.00

PSL/NMSU

Y (METERS)

| X (METERS) | 120.00 | 170.00 | 220.00 | 270.00 | 320.00 | 370.00 | 420.00 |
|------------|--------|--------|--------|--------|--------|--------|--------|
| -50.00 | 20.00 | 70.00 | 120.00 | 170.00 | 220.00 | 270.00 | 320.00 |

DIRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E-1327
TIME: 17 h, 06 m, 09.619 s

page D 17

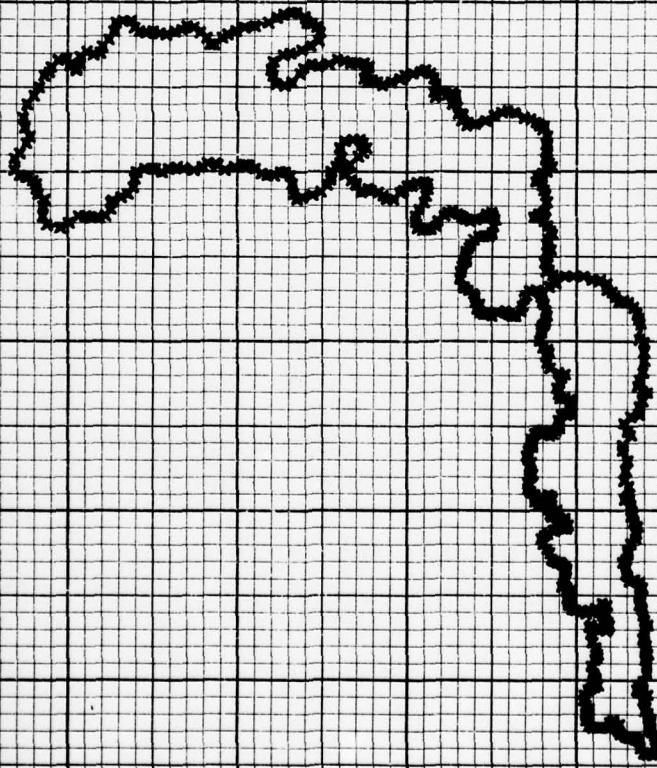
DIRAT-1 TEST DATE: 10-14-78

MISSION CODE: AA

FIRE, DIESEL, GIL, RUBBER, GASOLINE

STATION: E-1327

TIME: 17 08 09.019



-50.00 0.00 50.00 100.00 150.00 200.00

Y (METERS)

NSW/NMSU

-30.00 20.00 70.00 120.00 170.00 220.00 270.00 320.00 370.00 420.00

X (METERS)

DIRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E-1327
TIME: 17 h, 06 m, 30.287 s

DIRT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL; NUMBER: GASOLINE
STATION: E-1327
TIME: 17 06 30.287

PSL/NMSU

-30.00 -50.00 0.00 50.00 100.00 150.00 200.00

Y (METERS)

-30.00 -20.00 70.00 120.00 170.00 220.00 270.00 320.00 370.00 420.00
X (METERS)

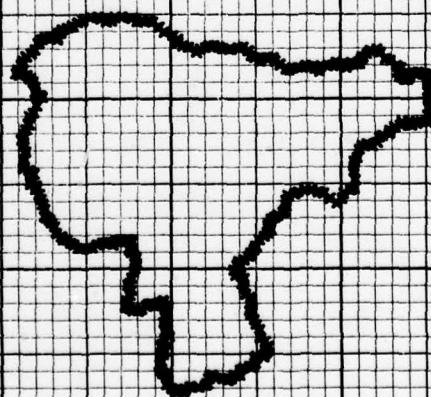
DIRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E-1328
TIME: 17 h, 05 m, 28.853 s

DIAT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL: RUBBER: GASOLINE
STATION: E-1328
TIME: 17 05 28.853

PSL/NBN/PSL

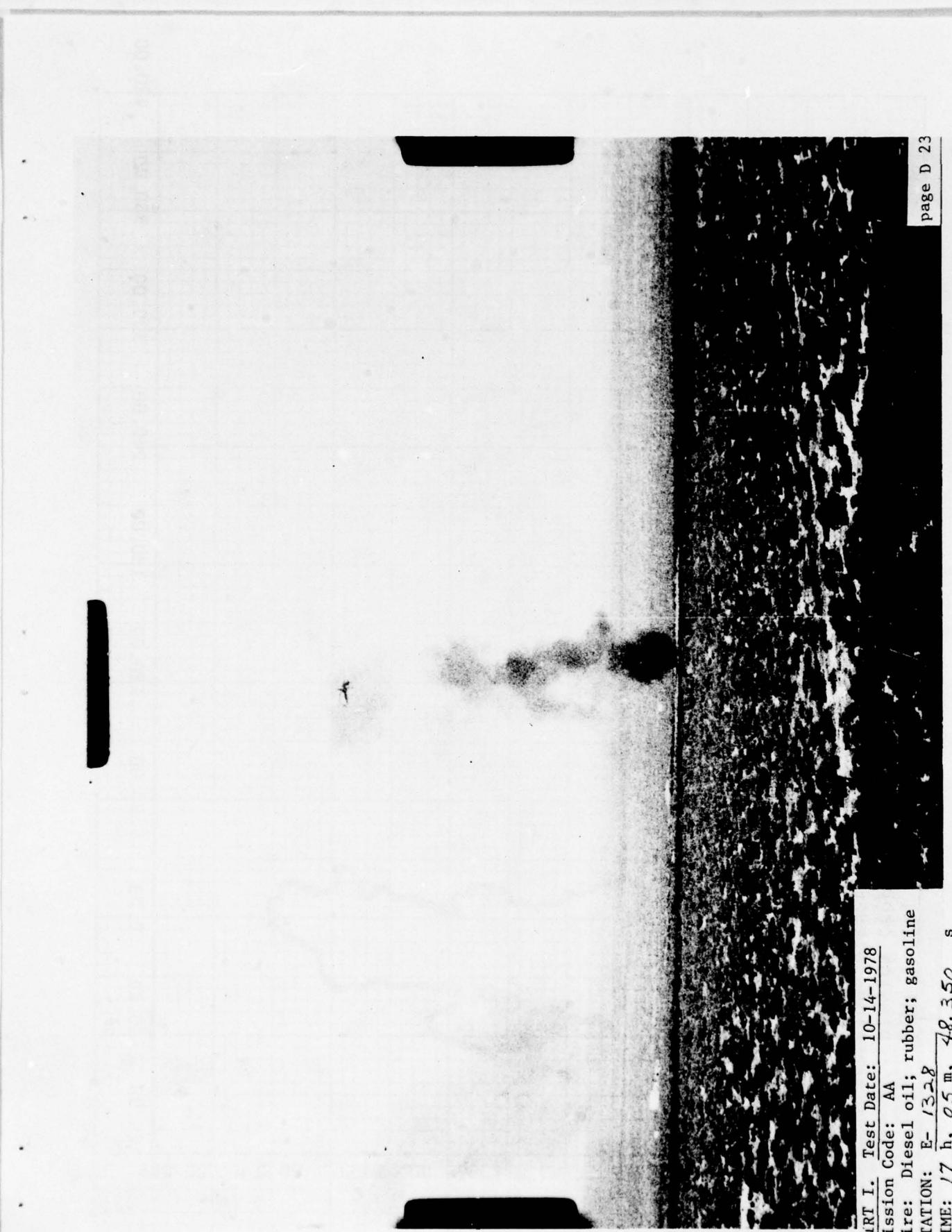
-50.00 0.00 50.00 100.00 150.00 200.00

Y (METERS)



-120.00 -50.00 0.00 50.00 100.00 150.00 200.00 300.00 350.00 420.00

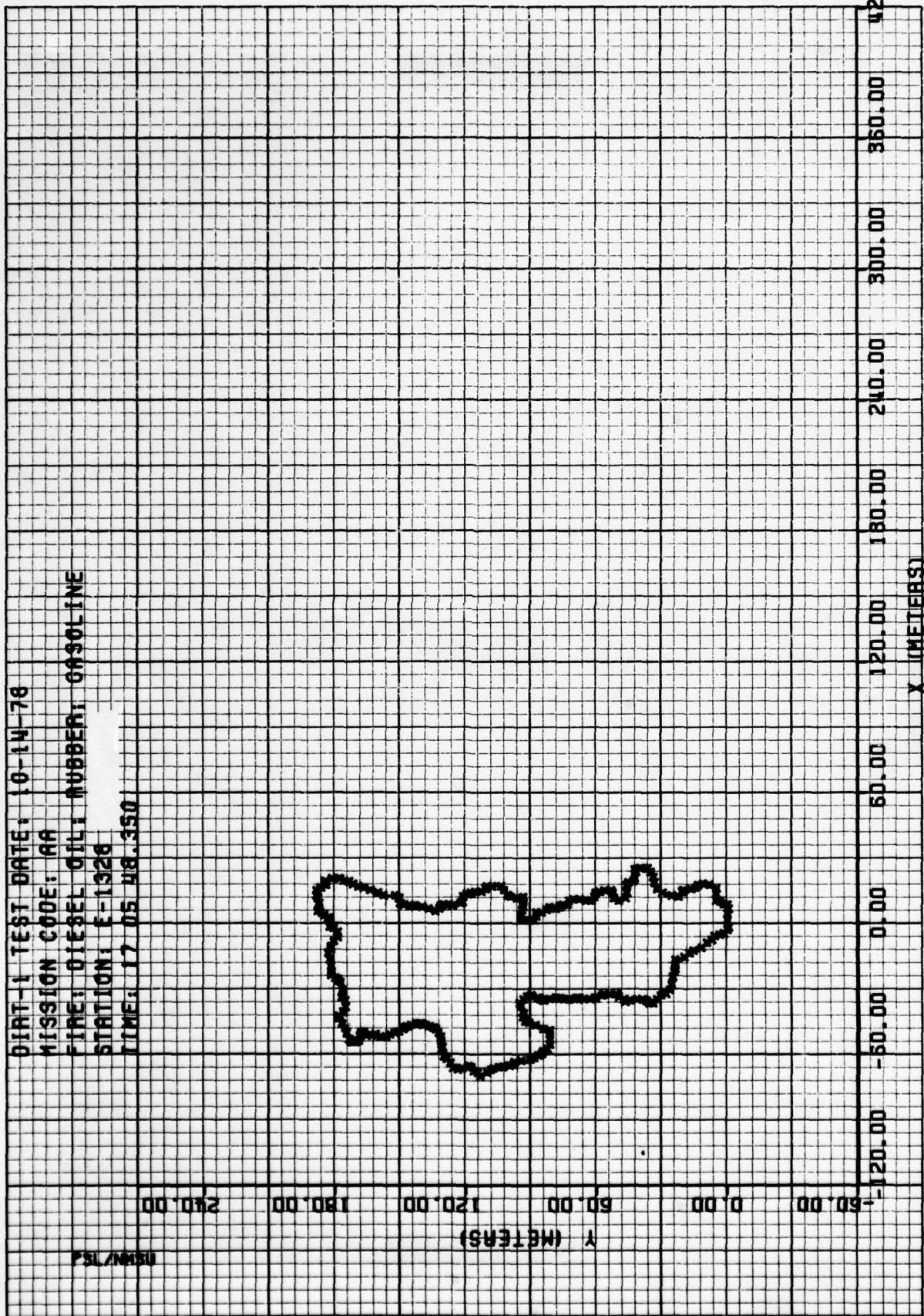
X (METERS)



DIRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E- 1328
TIME: 17 h, 05 m, 48.350 s

page D 23

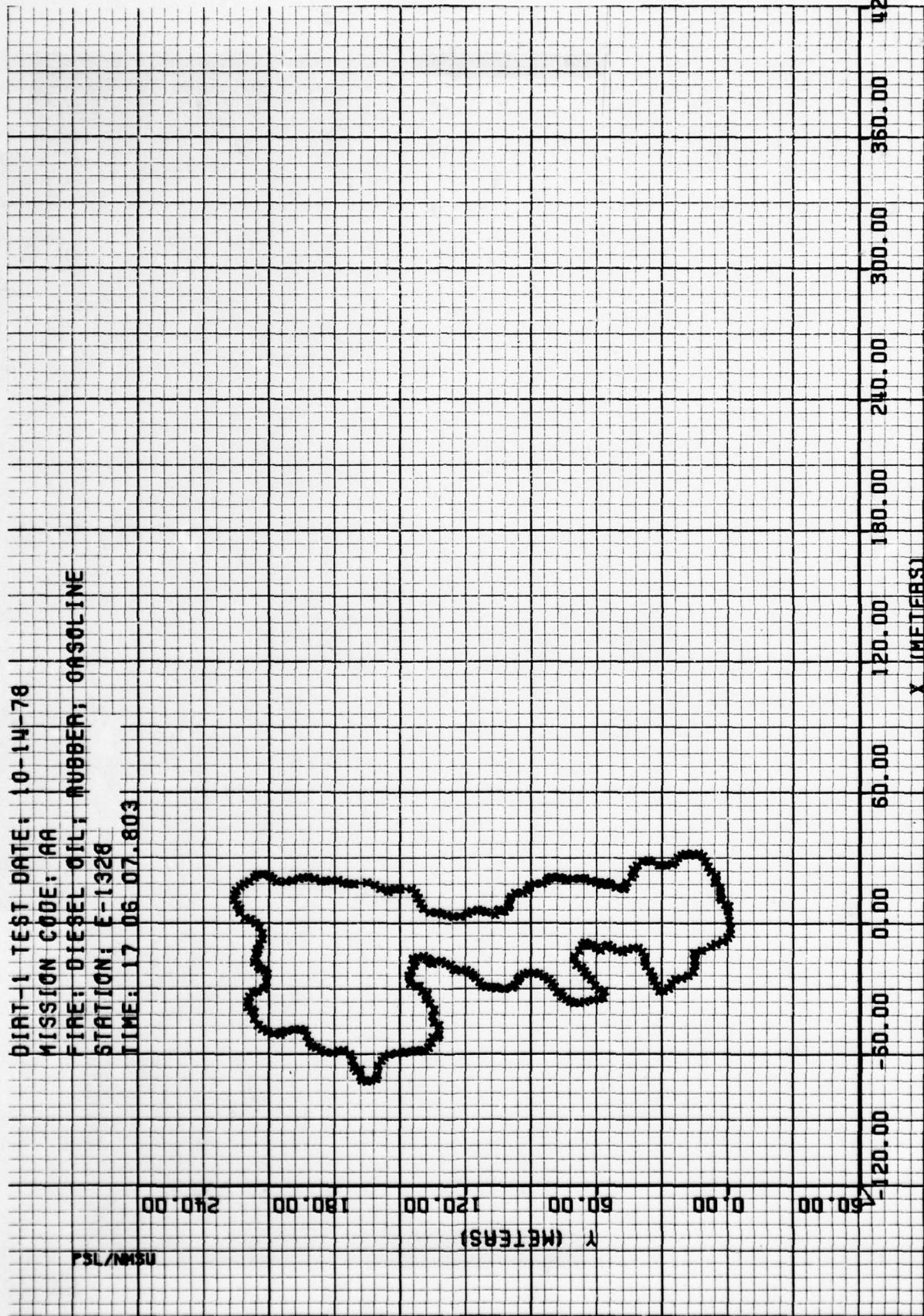
DIRT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL NUMBER: GASOLINE
STATION: E-1328
TIME: 17 05 48.350





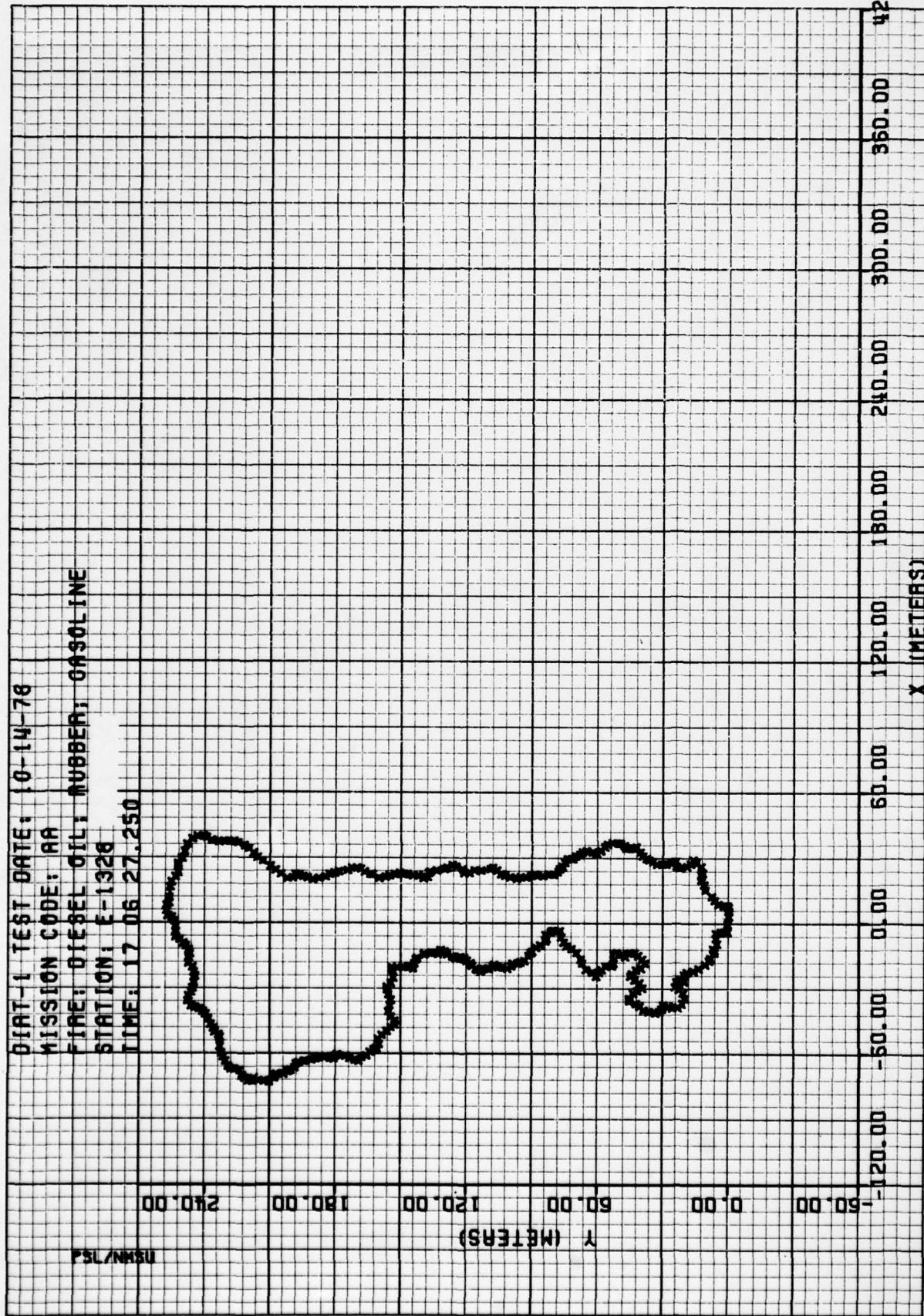
DIRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E-1328
TIME: 17 h, 06 m, 07.803 s

DIRT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL; RUBBER; GASOLINE
STATION: E-1328
TIME: 17 06 07.803



DIRT 1. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E-1328
TIME: 17 h, 06 m, 27. 250 s

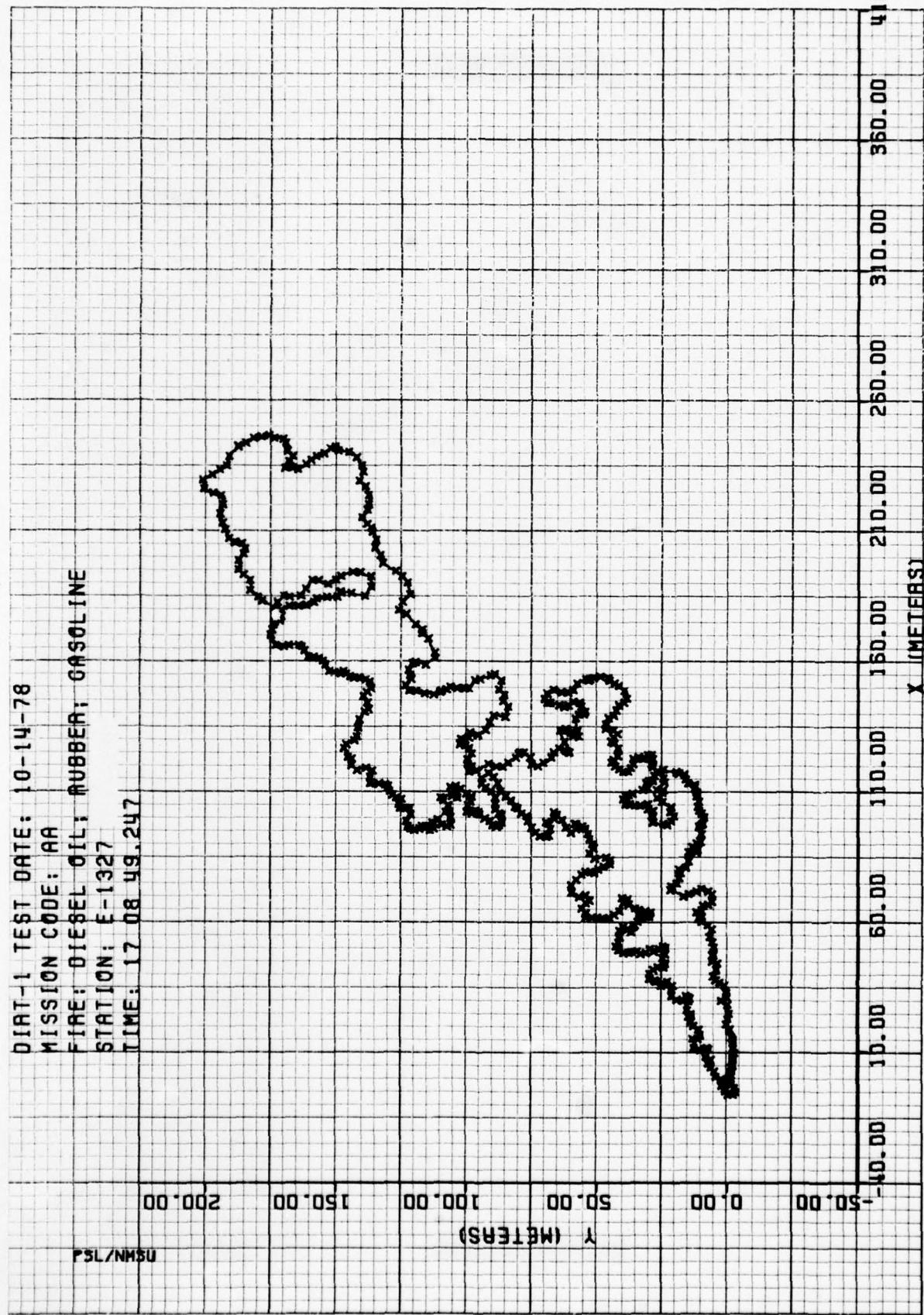
DIRT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL: NUMBER: GASOLINE
STATION: E-1328
TIME: 17 06 27.250



PSL/NMSU

DIRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E-1327 49.247 s
TIME: 17 h, 08 m, 49 247 s

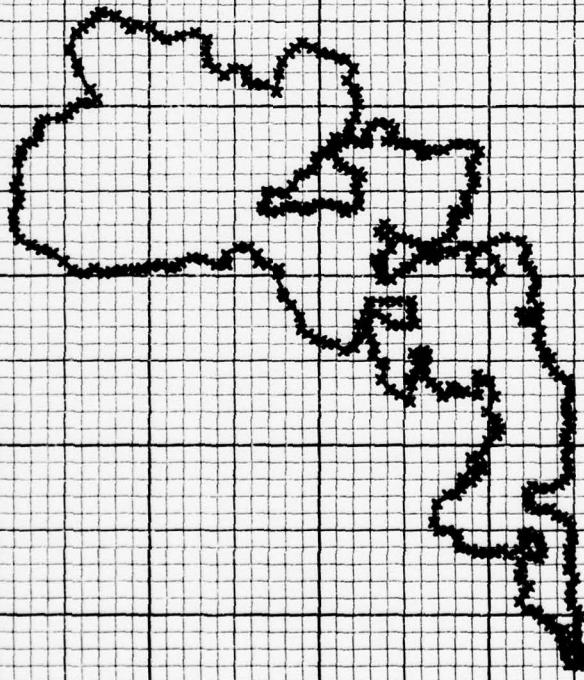
DIRT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL: RUBBER: GASOLINE
STATION: E-1327
TIME: 17 08 49.247



PSL/NMSU

DIRF L. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber: gasoline
STATION: E- / 327
TIME: 17 h, 02 m, 02.934 s

DIRT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL: RUBBER: GASOLINE
STATION: E-1327
TIME: 17 09 09.93W



-50.00 0.00 50.00 100.00 150.00 200.00

Y (METERS)

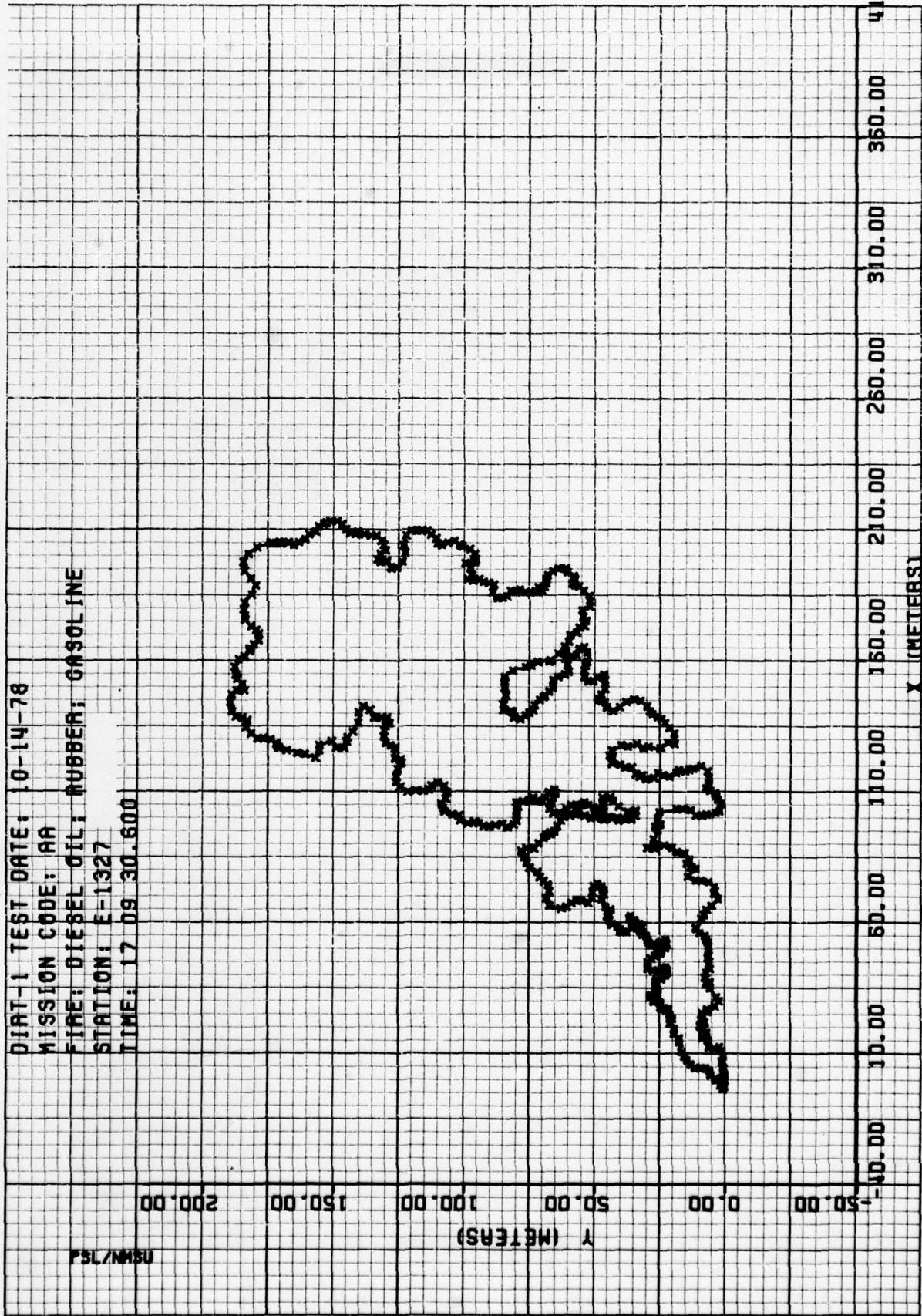
PSL/NMSU

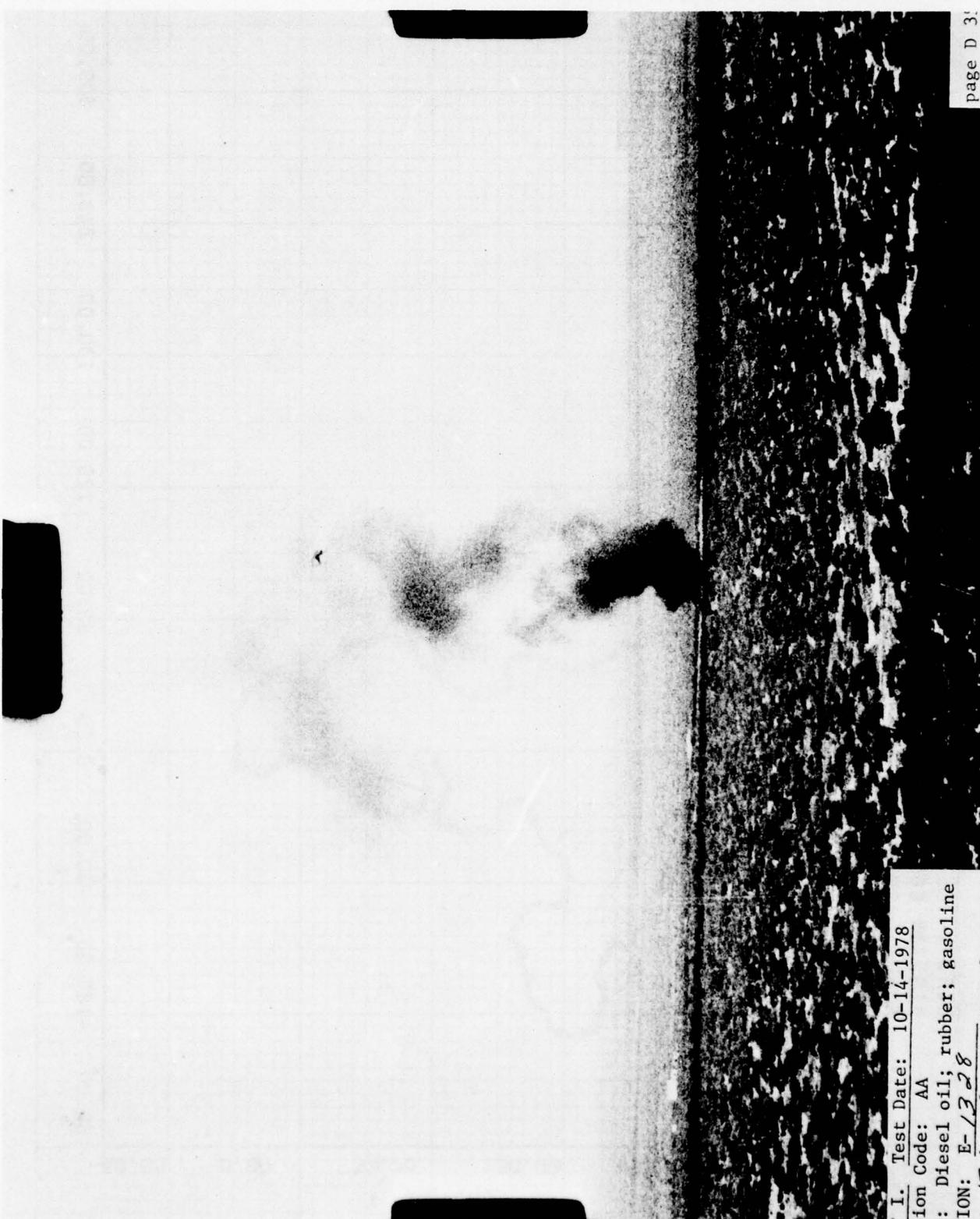
-40.00 10.00 60.00 110.00 160.00 210.00 260.00 310.00 360.00 410.00

X (METERS)

DIRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E-1327
TIME: 17 h, 09 m, 30.600 s

DIRT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL RUBBER: GASOLINE
STATION: E-1327
TIME: 17 09 30.600

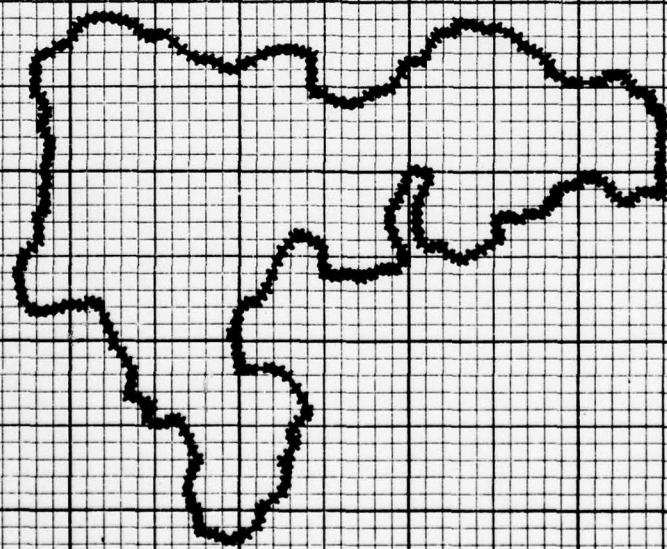




page D 3.

DIRI I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E-1328
TIME: 17 h, 08 m, 49.280 s

DATA-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL, NUMBER: GASOLINE
STATION: E-1328
TIME: 17:08 49.280



PSL/MSU

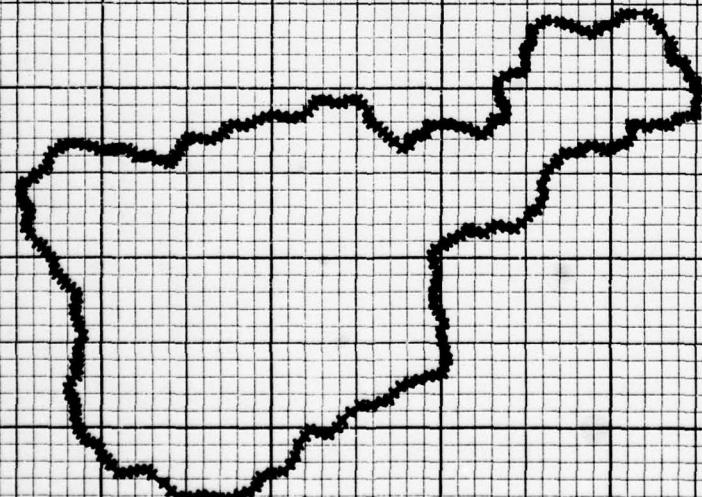
-60.00 -120.00 -180.00 -240.00 -300.00 -360.00

Y (METERS)

-60.00 -120.00 -180.00 -240.00 -300.00 -360.00

DIRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E-1328
TIME: 17 h, 09 m, 28.000 s

DIRT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL, RUBBER, GASOLINE
STATION: E-1928
TIME: 17 09 28.200



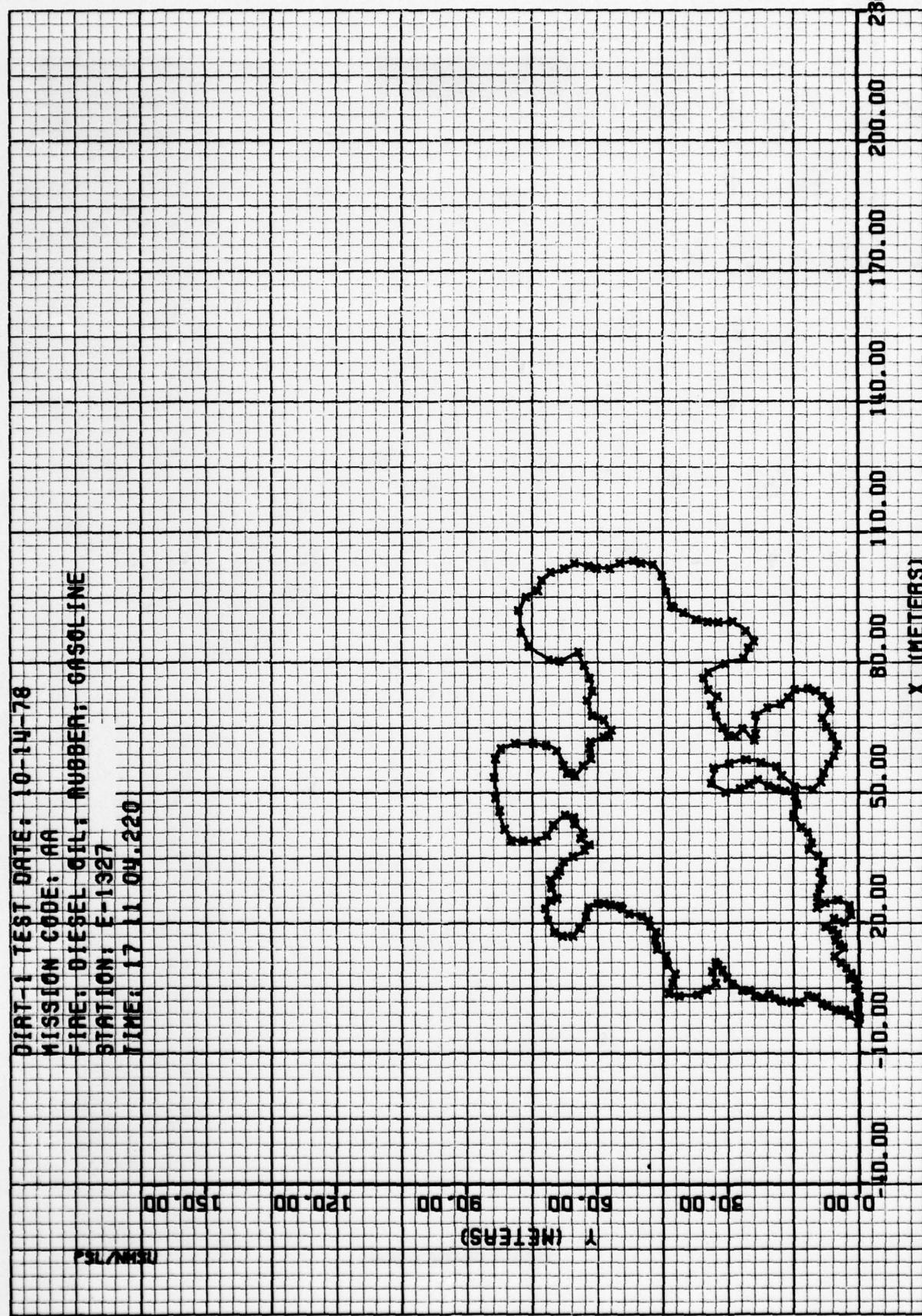
PSM/TSW

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Y (METERS)

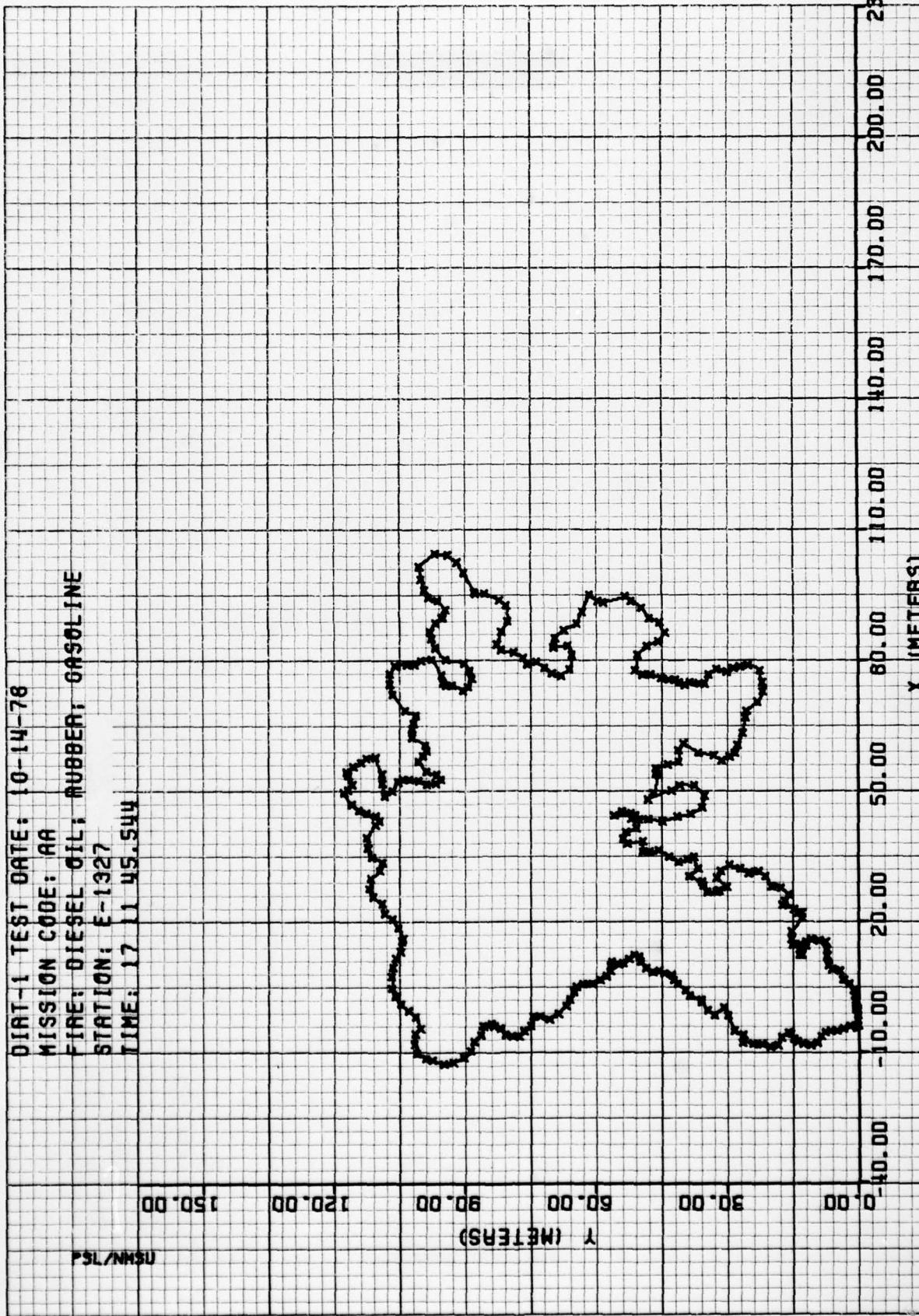
DIRI I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E-1327
TIME: 27 h, 11 m, 04.220 s

DIRT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL: RUBBER, GASOLINE
STATION: E-1927
TIME: 17 11 04.220



DIRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E-327
TIME: 17 h, 11 m, 45.544 s

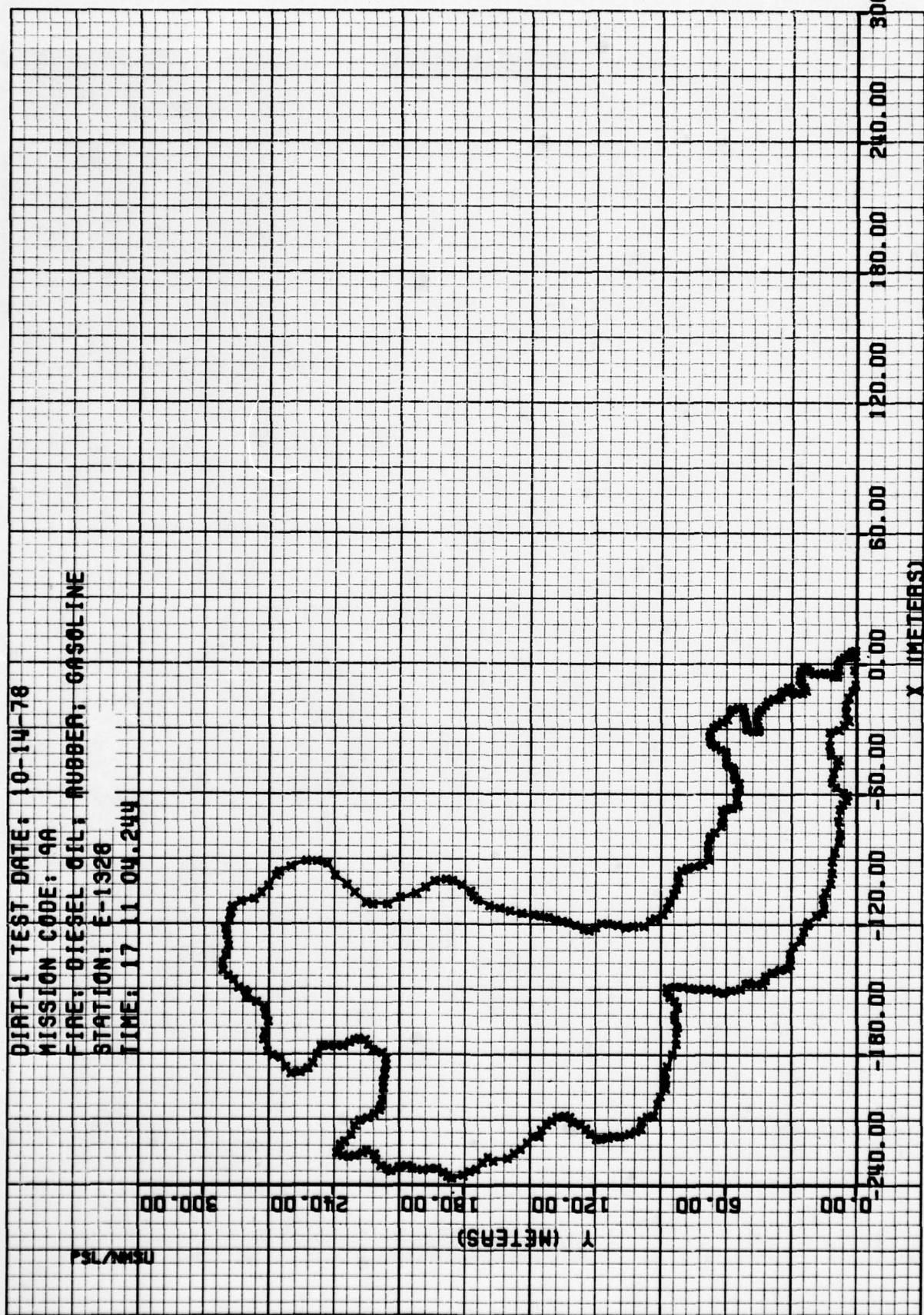
DIAT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL; RUBBER; GASOLINE
STATION: E-1327
TIME: 17 11 45.544





DIRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E-328
TIME: 27 h, 11 m, 04 244 s

PIRT-1 TEST DATE: 10-14-78
MISSION CODE: QA
FIRE: DIESEL OIL, RUBBER, GASOLINE
STATION: E-1928
TIME: 17 11 04.244





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WRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E- 1328
TIME: 17 h, 11 m, 23.706 s

DIRT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL; RUBBER; GASOLINE
STATION: E-1328
TIME: 17 11 23.706

0.00 50.00 100.00 150.00 200.00 250.00 300.00

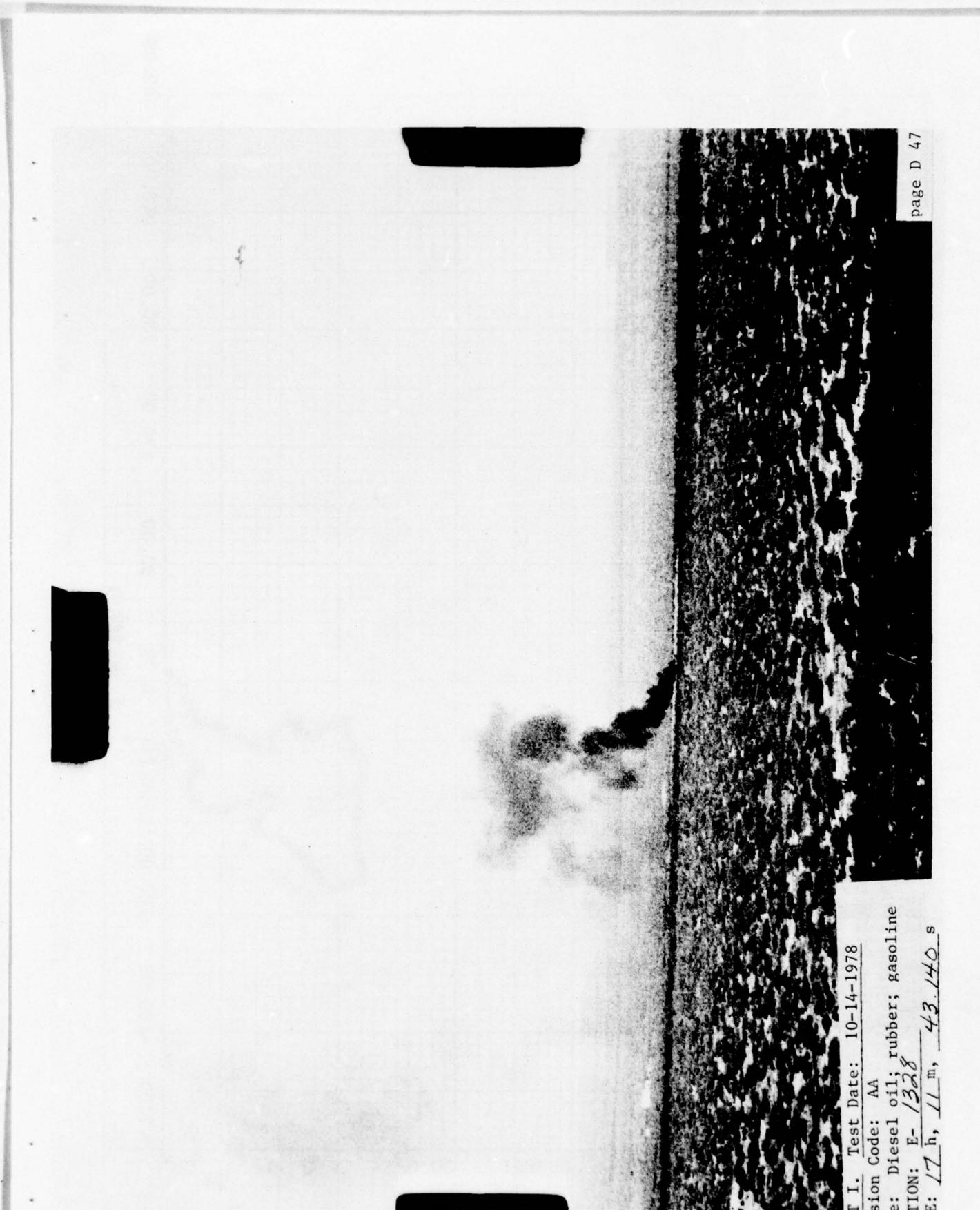
Y (METERS)

PSL/NMN



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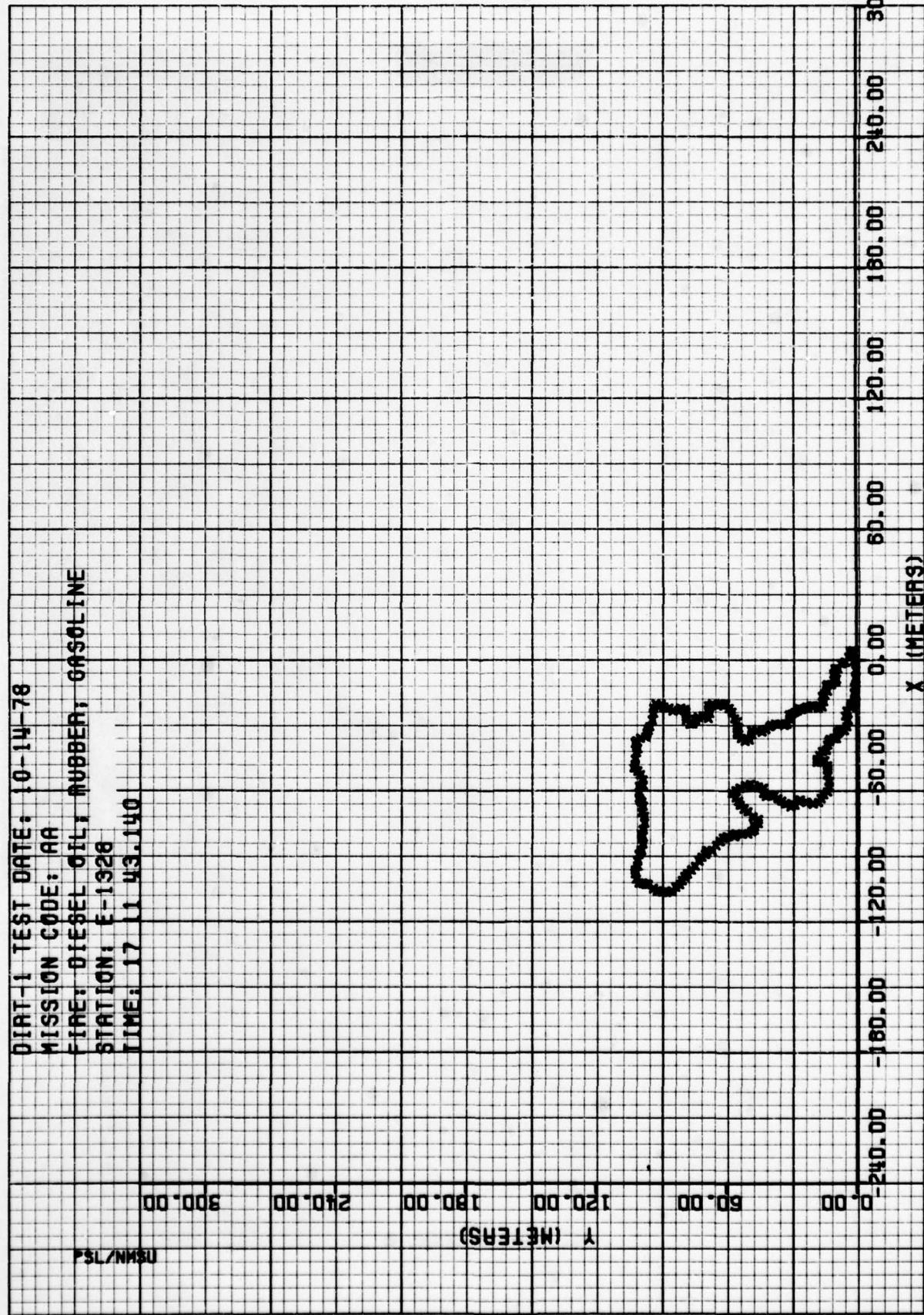
X (METERS)



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UNIT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E-1328
TIME: 17 h, 11 m, 43.140 s

DIRT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL, RUBBER, GASOLINE
STATION: E-1328
TIME: 17 11 43.140

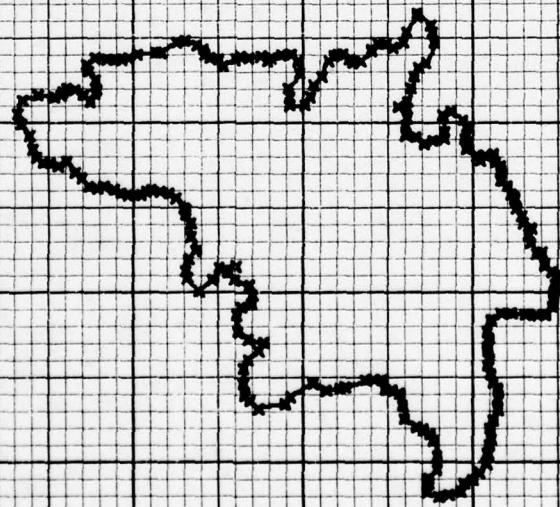


DIRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E- / 327
TIME: /7 h, /3 m, 55.310 s

page D 4c

DIRT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL GEL, RUBBER, GASOLINE
STATION: E-1327
TIME: 17 13 55.310

PSL/MSW/TS



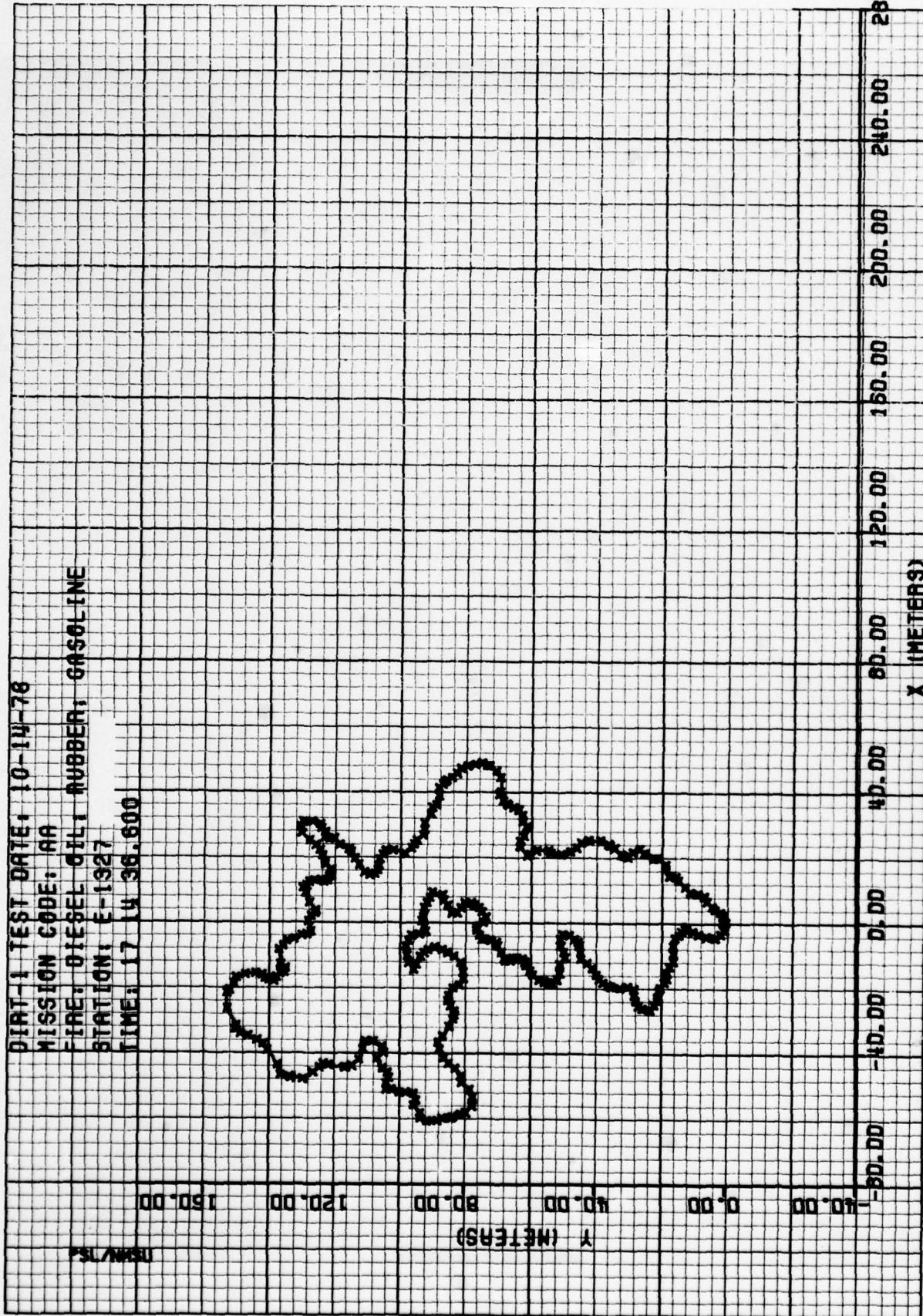
Y (METERS)

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X (METERS)

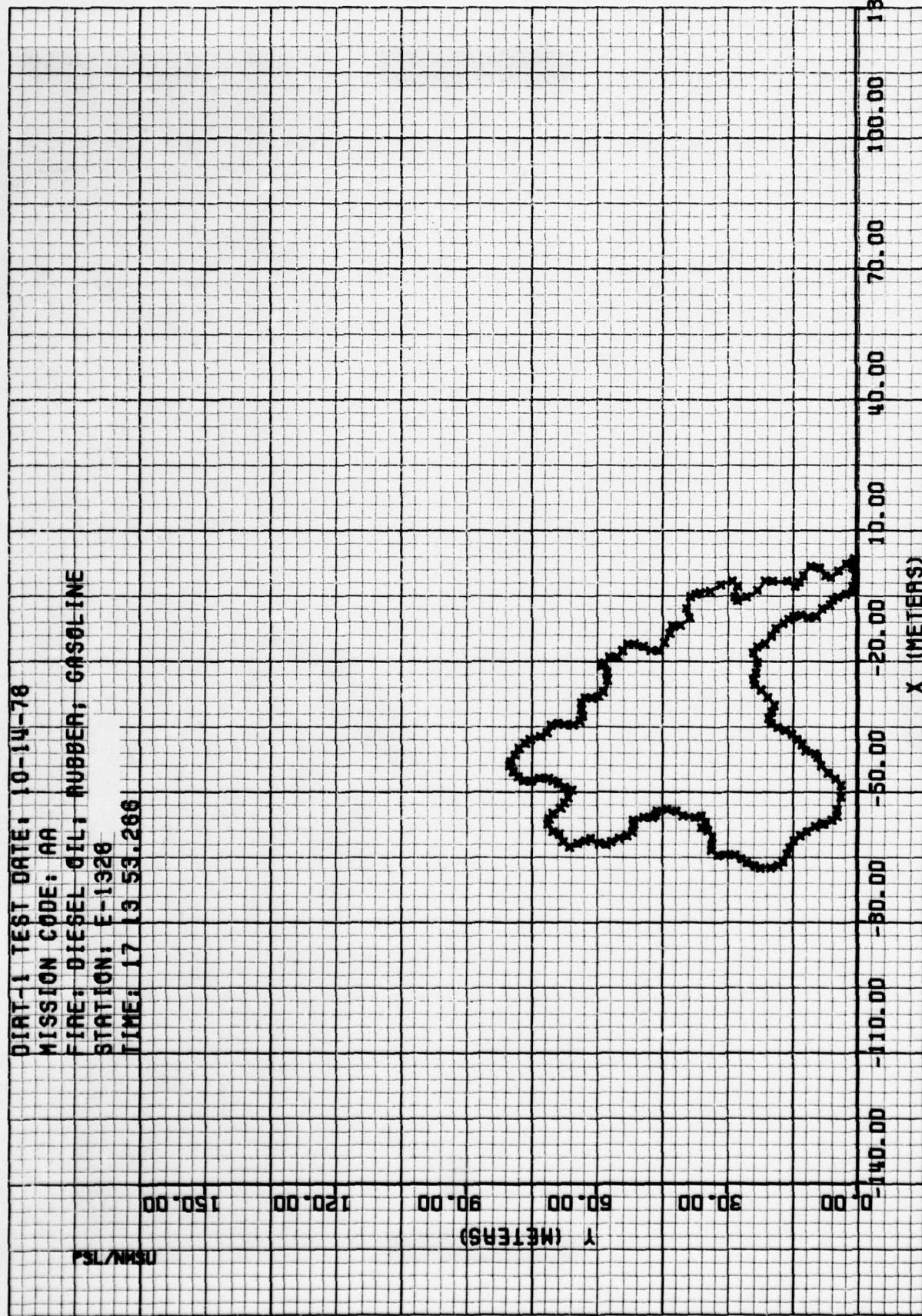
DIRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E- / 327
TIME: 17 h, 14 m, 36.600 s

DIRT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL NUMBER: GASOLINE
STATION: E-1327
TIME: 17 4 36.000



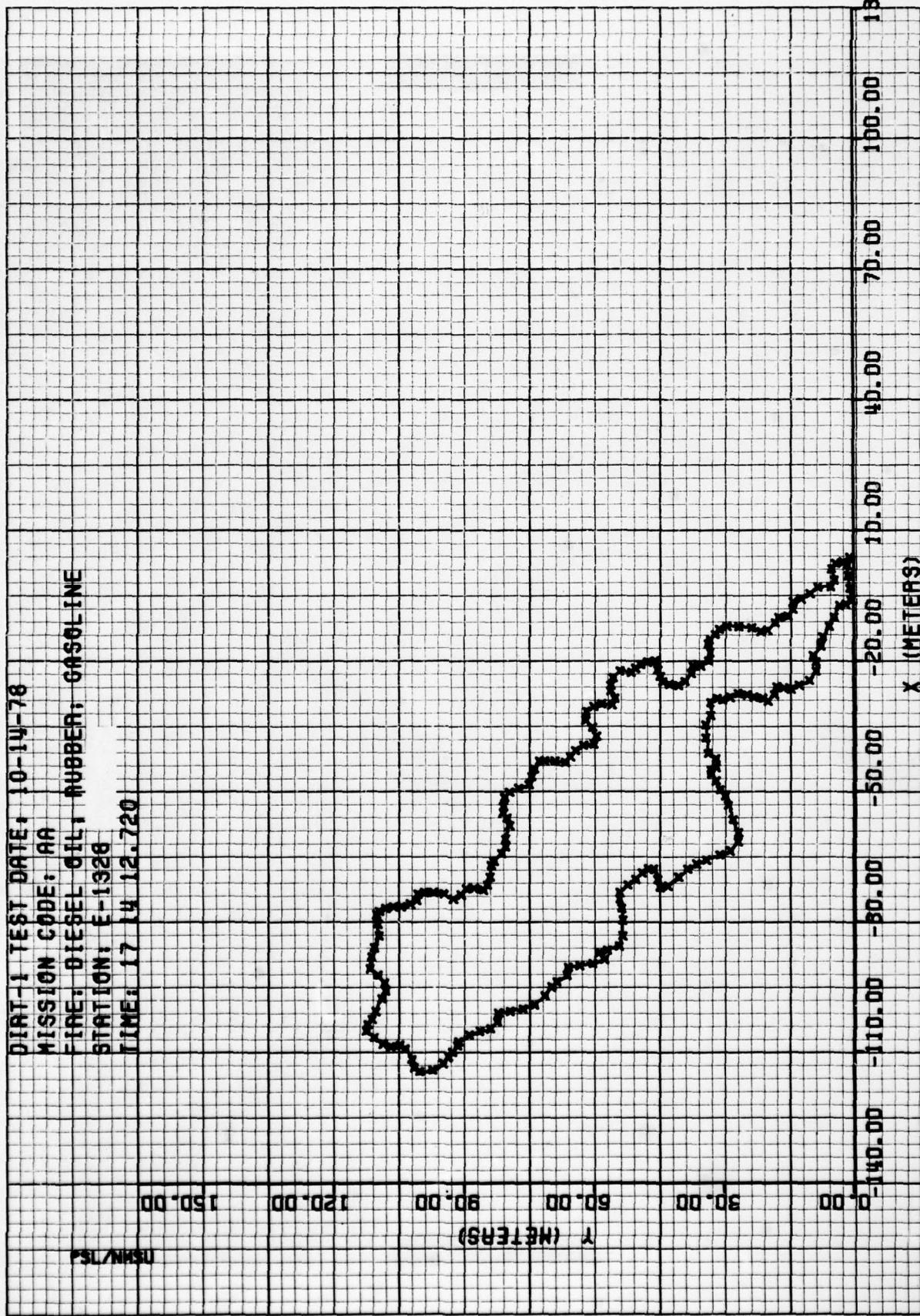
DIRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E-1328
TIME: 17 h, 13 m, 53 s 266 s

DIRT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL; RUBBER; GASOLINE
STATION: E-1326
TIME: 17 13 53.286



DIRT 1. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E-1328
TIME: 17 h, 12 m, 12.720 s

DIRT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL, NUMBER: GASOLINE
STATION: E-1328
TIME: 17 14 12.720



DIRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E-328
TIME: 22 h, 44 m, 32.147 s

DIAT-1 TEST DATE: 10-14-78

MISSION CODE: AA
FIRE: DIESEL OIL, RUBBER, GASOLINE

STATION: E-1328

TIME: 17 14 32.147

PSL/NMSU

-10.00 30.00 50.00 90.00 120.00 150.00

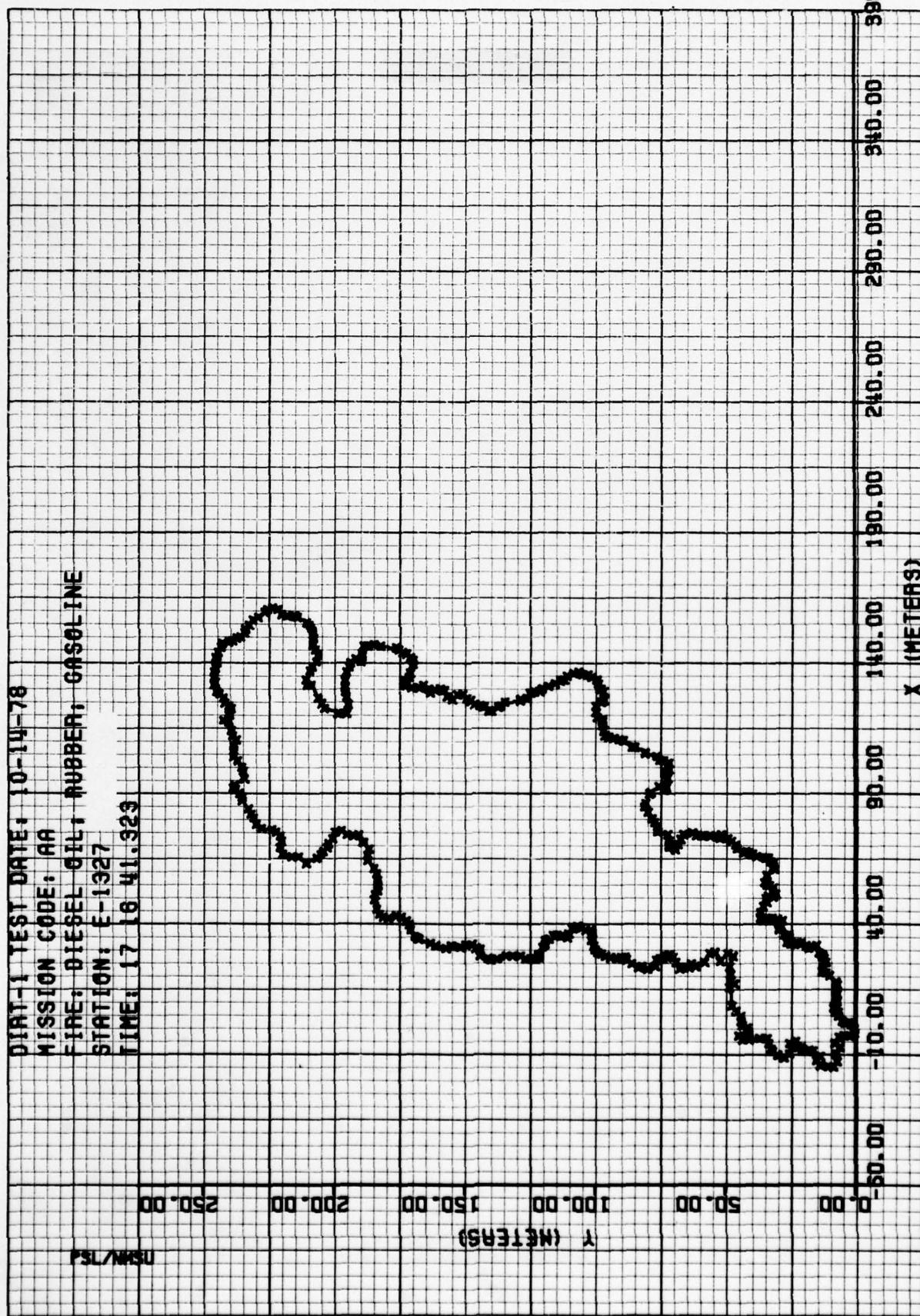
Y (METERS)

-140.00 -110.00 -80.00 -60.00 -20.00 10.00 40.00 70.00 100.00 130.00

X (METERS)

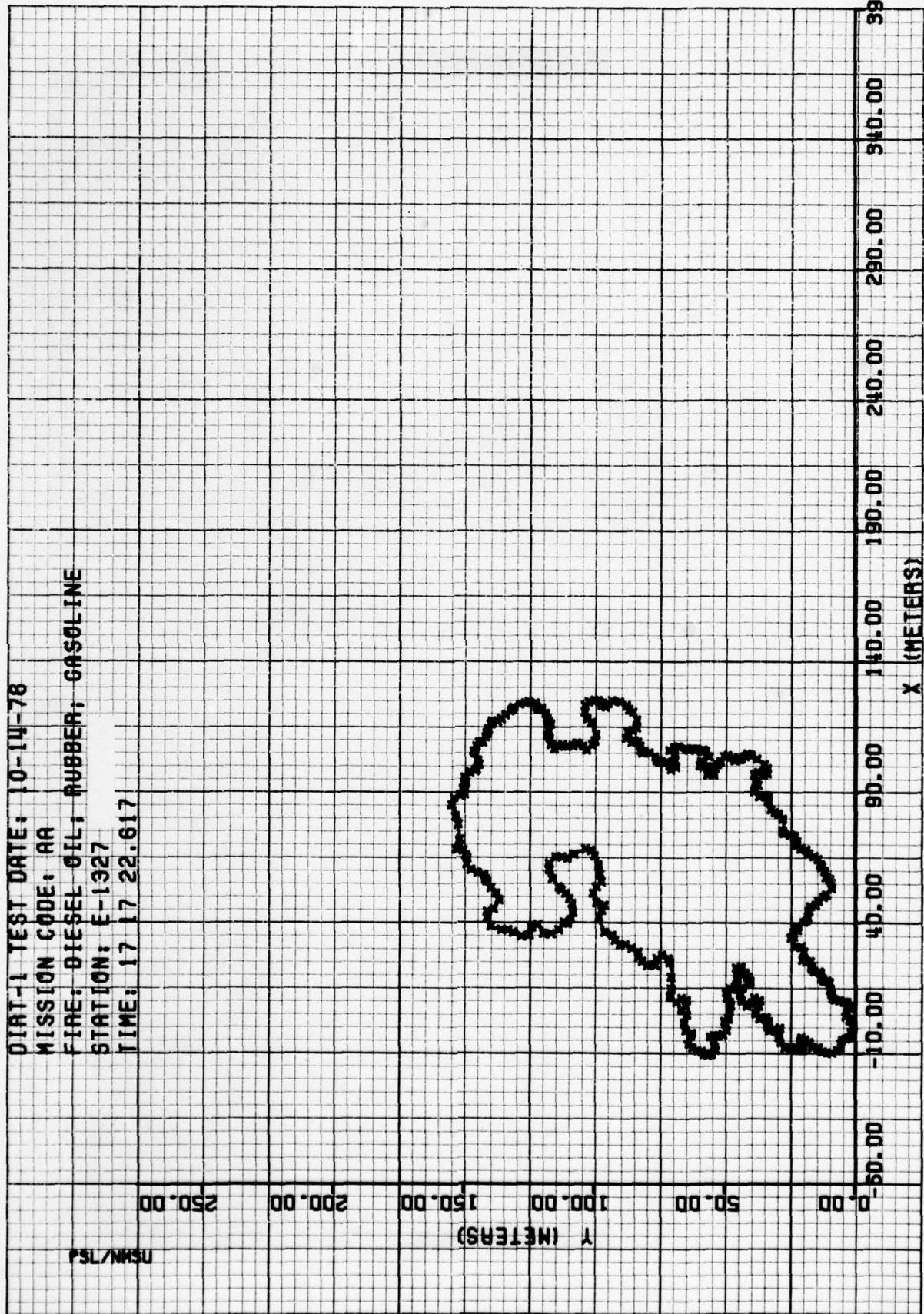
IRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E- / 327
TIME: 17 h, 16 m, 41.323 s

DATA-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL: RUBBER, GASOLINE
STATION: E-1 327
TIME: 17 18 41.323

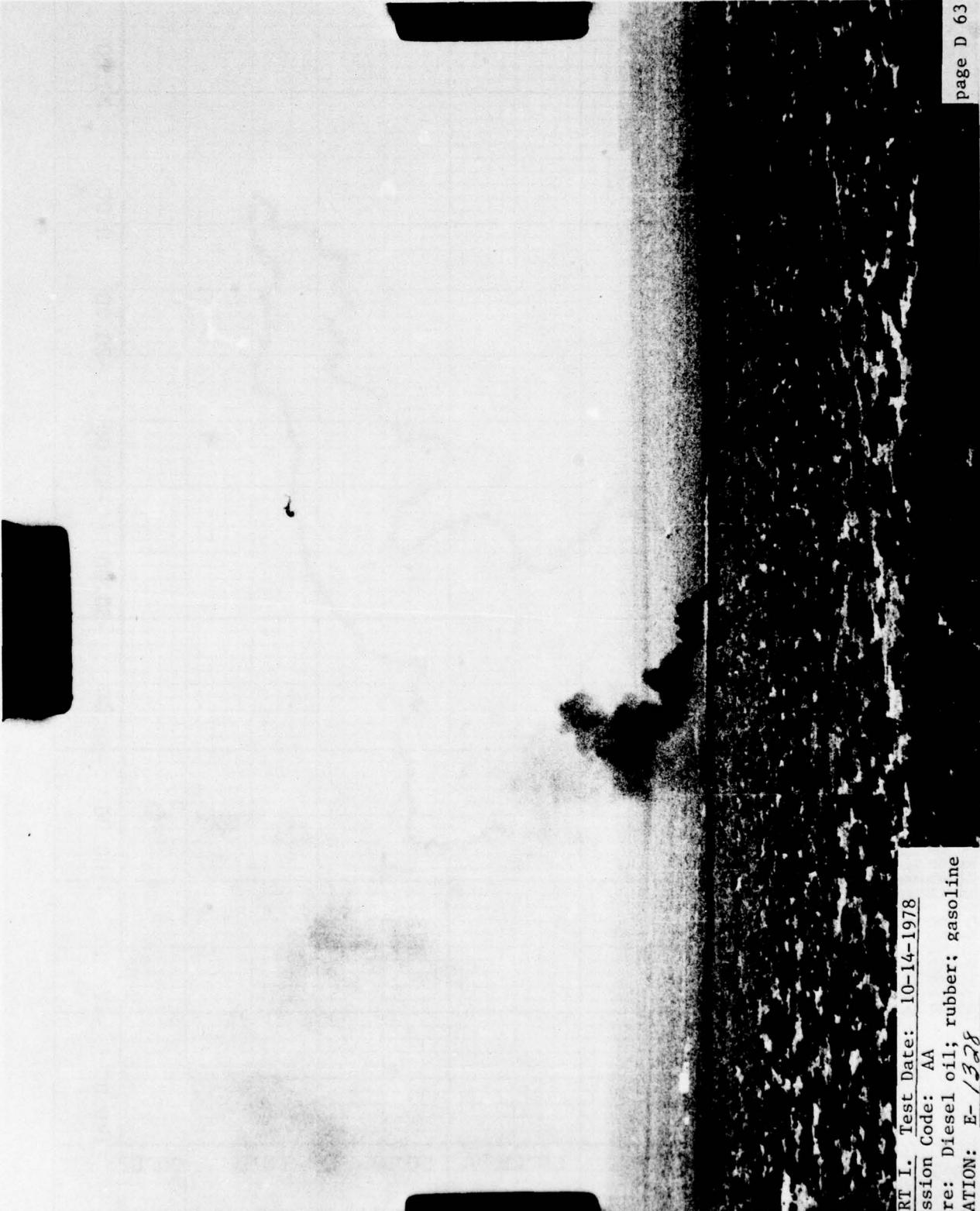


PIRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E- 327
TIME: 17 h, 17 m, 22.617 s

DIRT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL GYL: RUBBER, GASOLINE
STATION: E-1327
TIME: 17 17 22.617



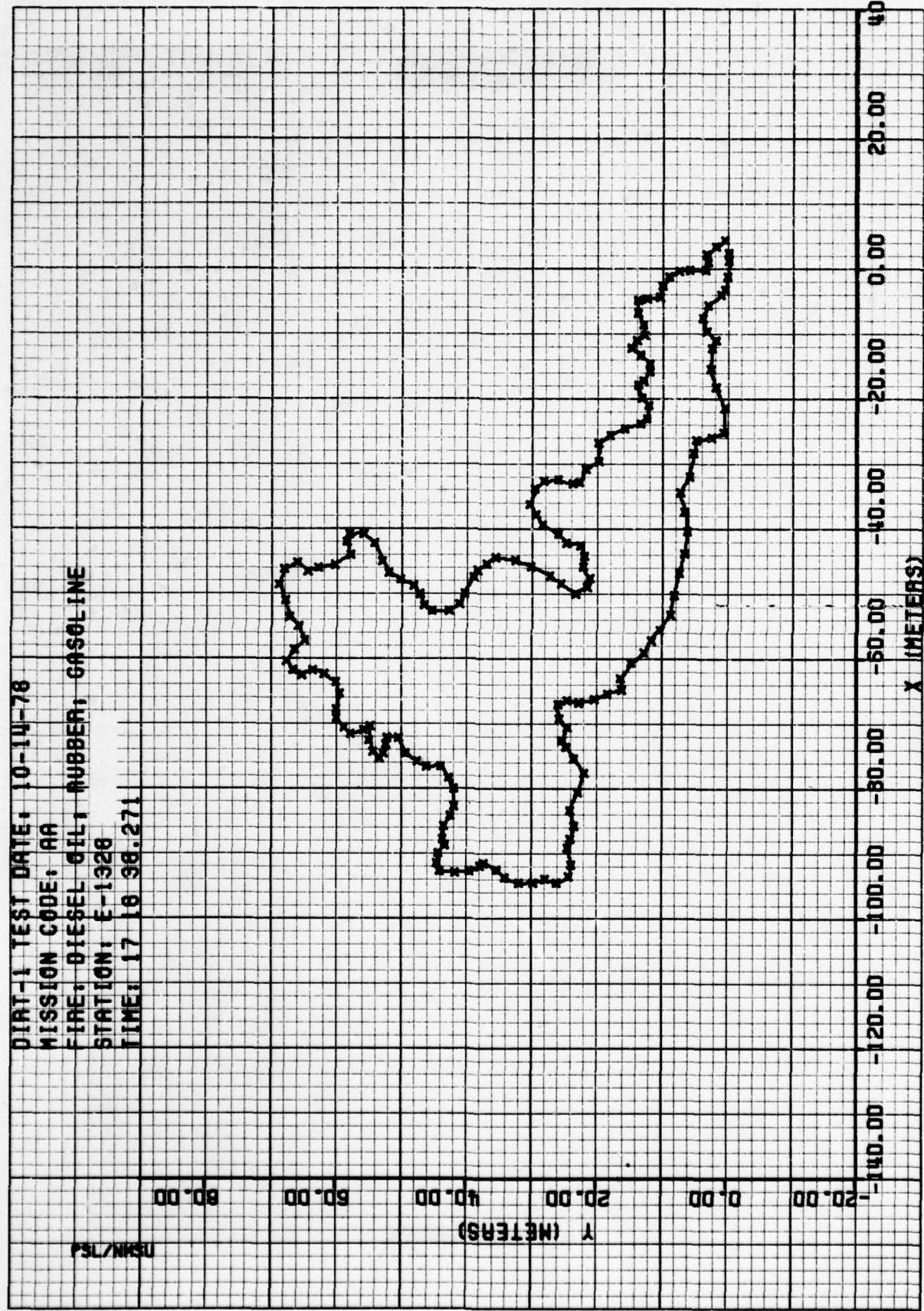
NSMN/PSL

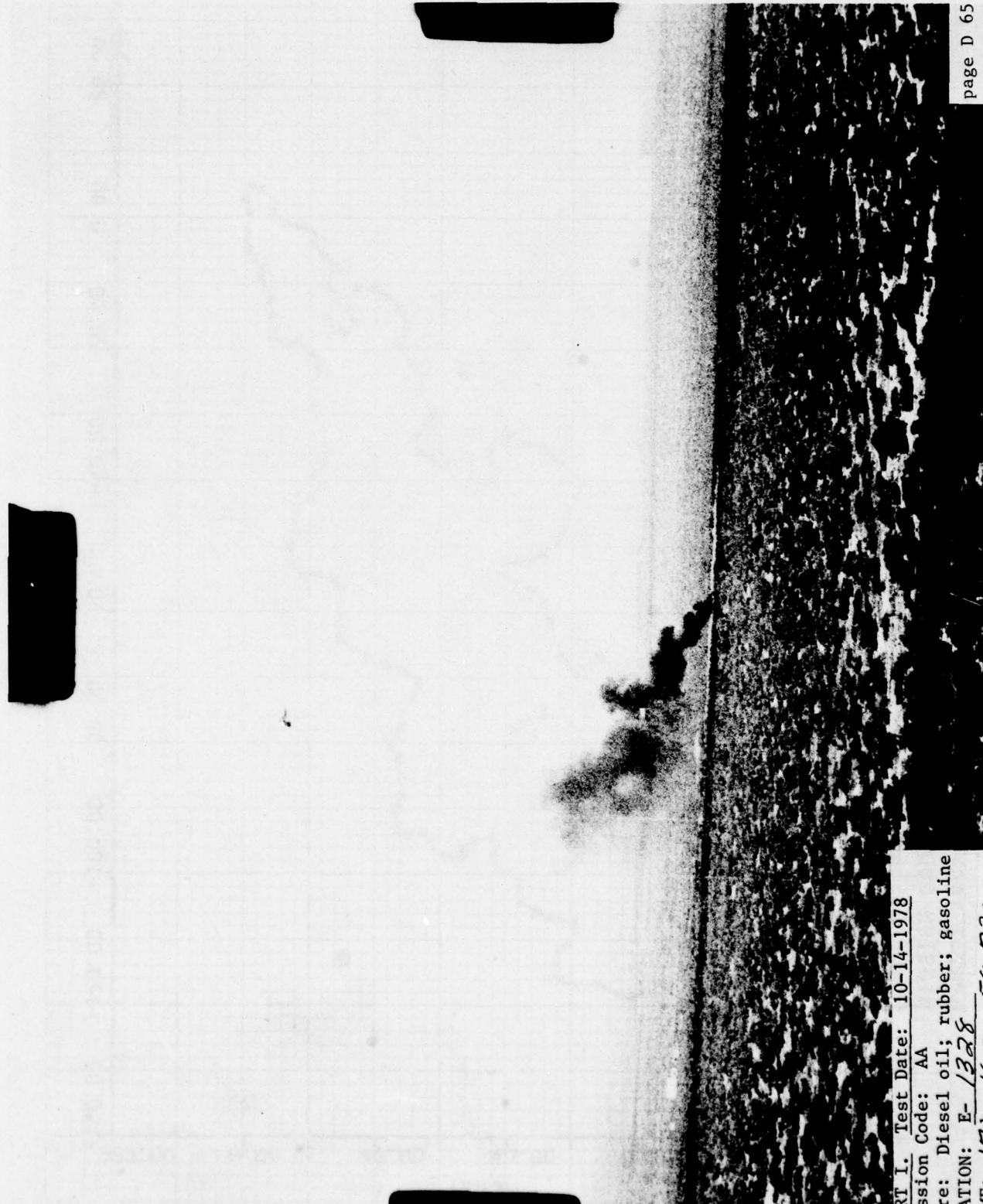


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TEST I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E- 1328
TIME: 17 h, 16 m, 38.271 s

DIRT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL GEL RUBBER, GASOLINE
STATION: E-1328
TIME: 17 0 36.271

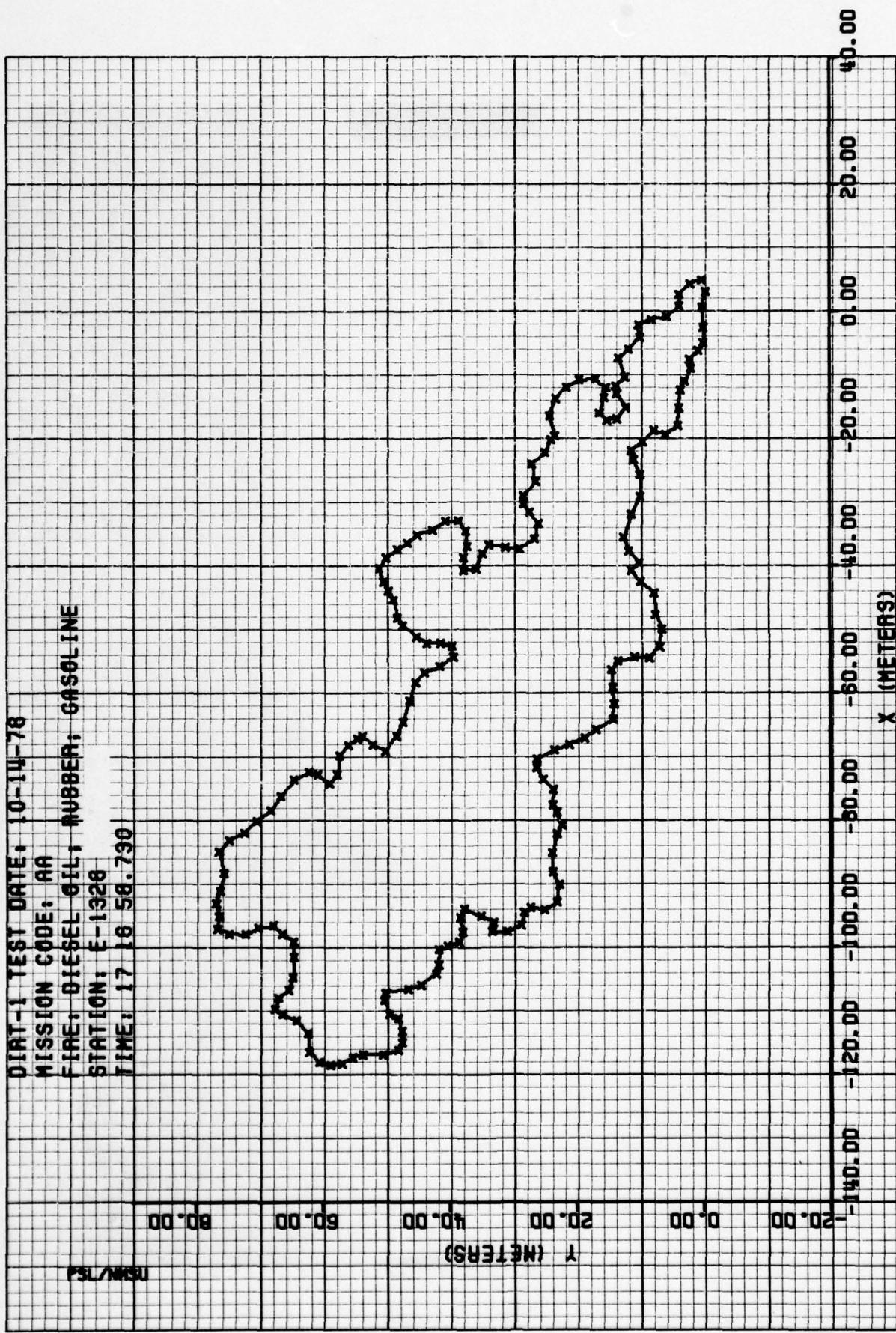




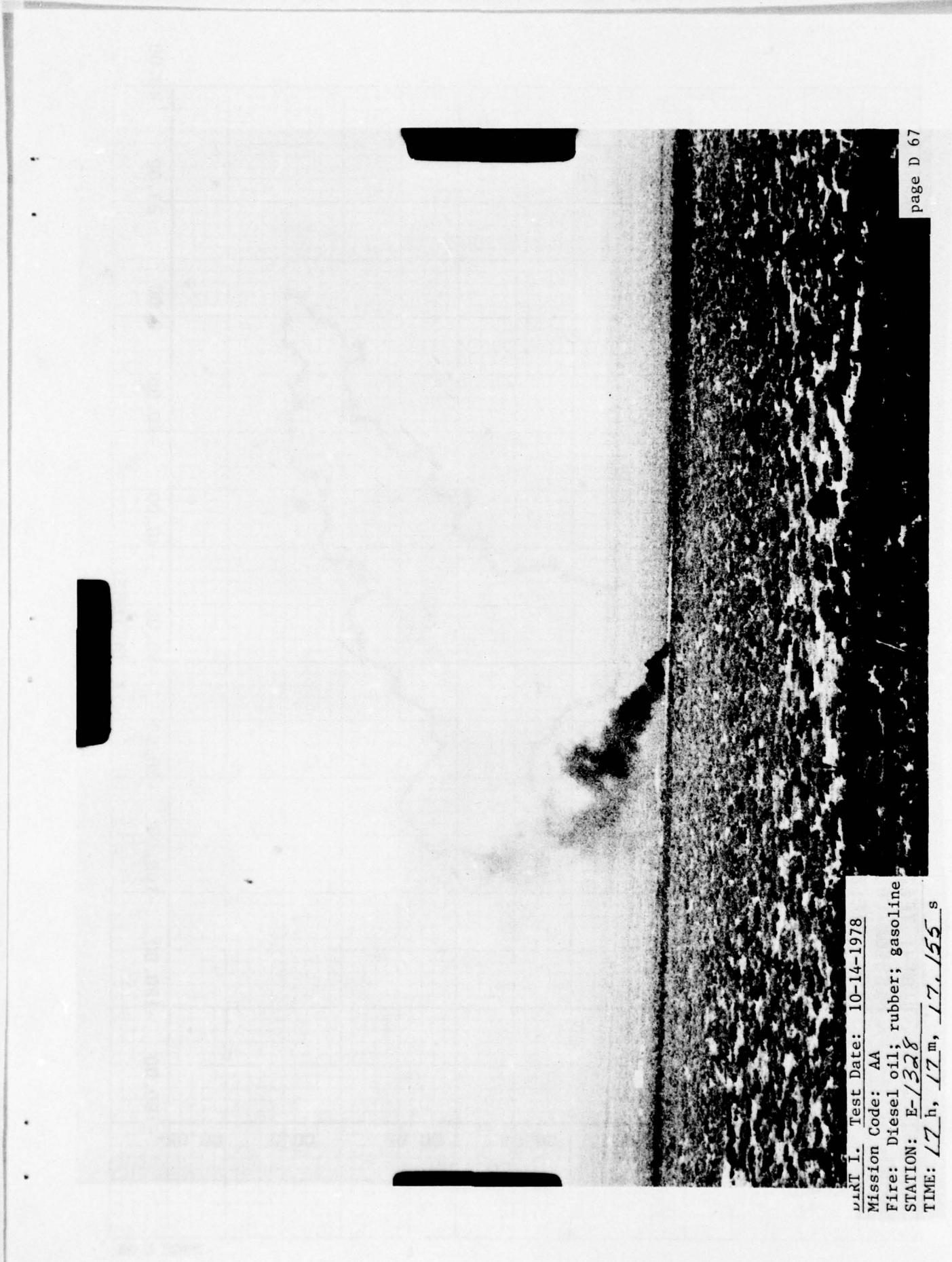
Page D 65

DIRT 1. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E-1328
TIME: 17 h, 16 m, 58.730 s

DATA - 1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL, RUBBER, GASOLINE
STATION: E-1328
TIME: 17 18 58.790



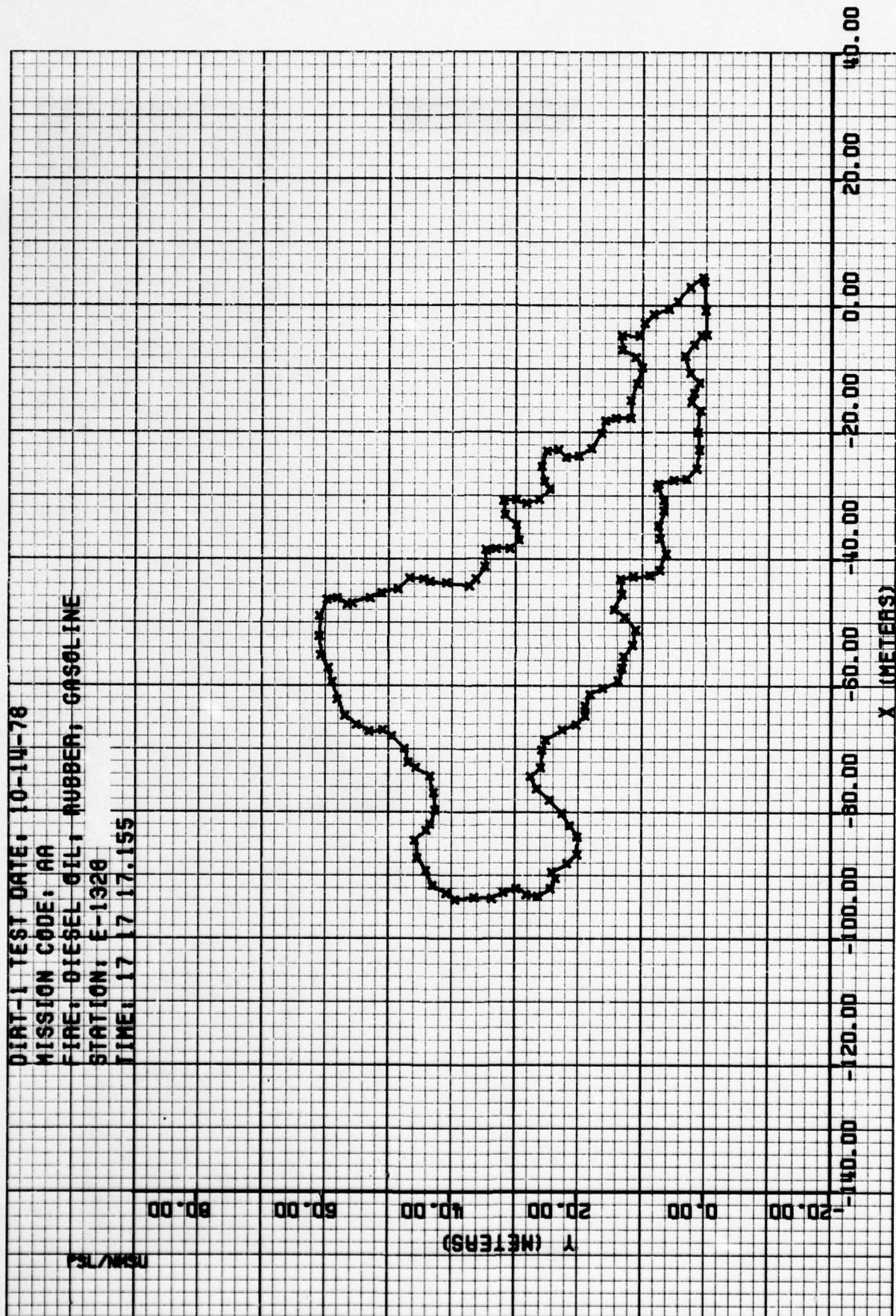
PSL/MSW



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TEST 1. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E-328
TIME: 17 h, 17 m, 17.155 s

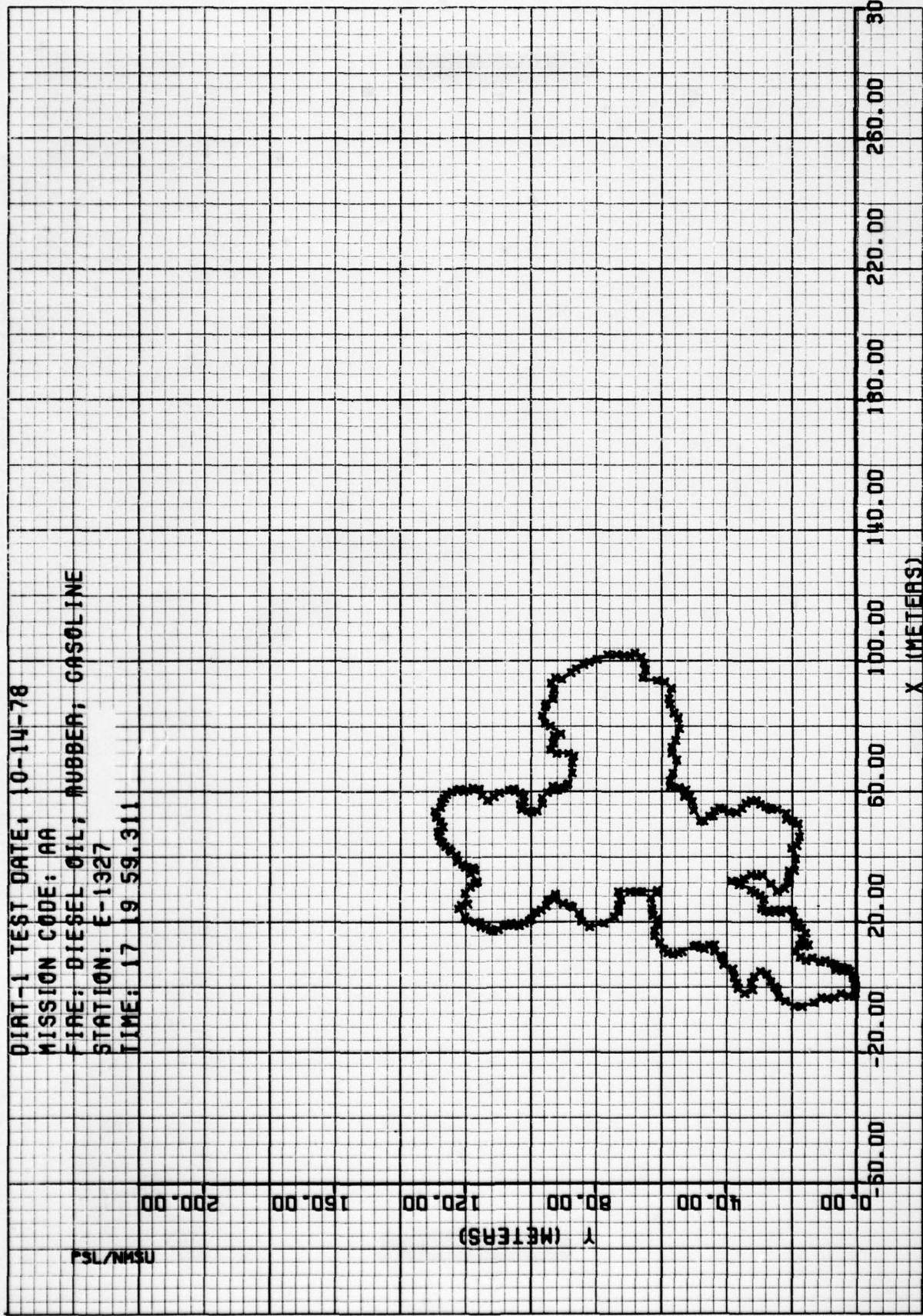
PIRT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL, RUBBER, GASOLINE
STATION: E-1328
TIME: 17 17 17.155



DIRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E-1327
TIME: 17 h, 19 m, 52.311 s

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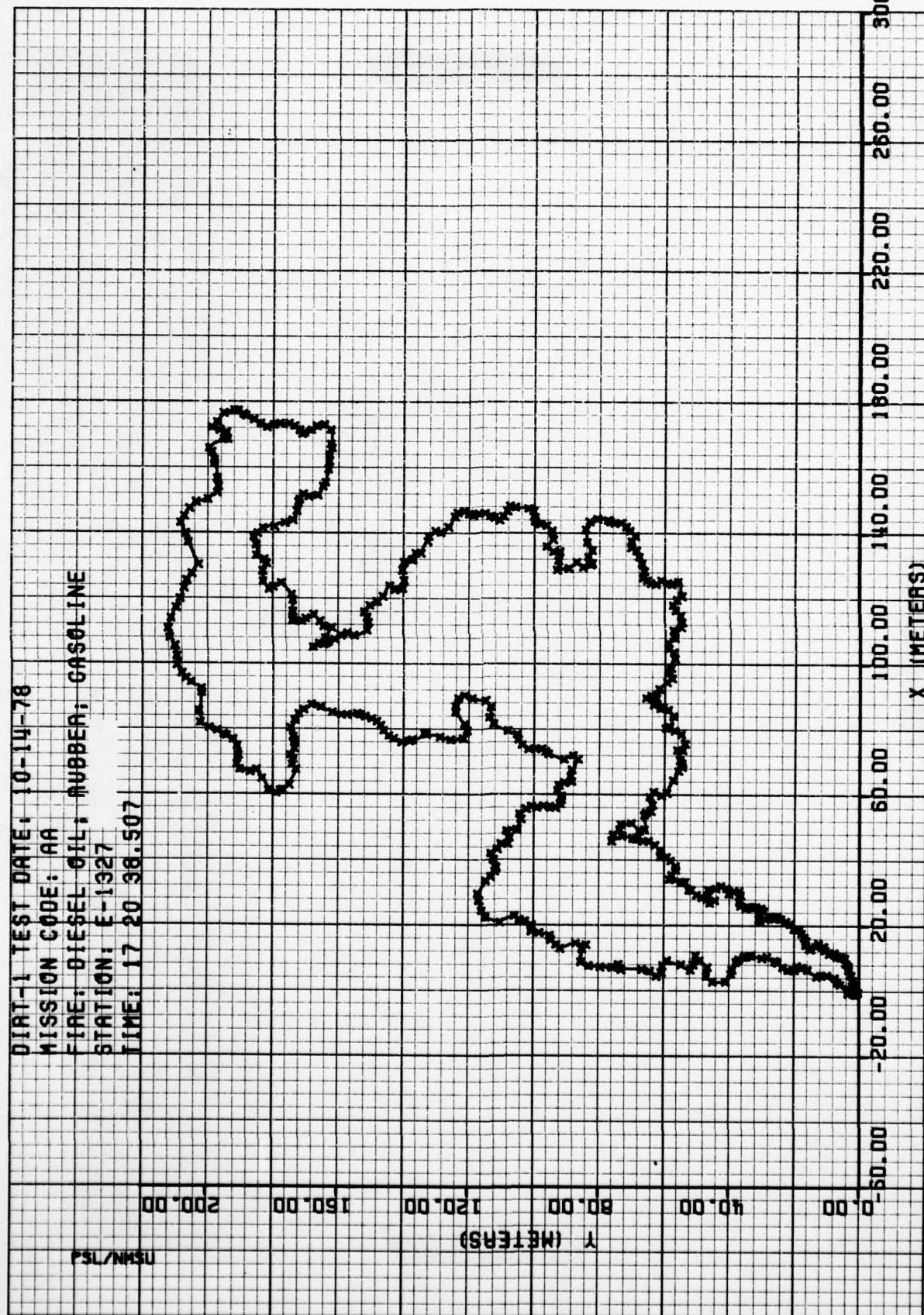
DIAT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL; RUBBER, GASOLINE
STATION: E-1327
TIME: 17 19 59.311





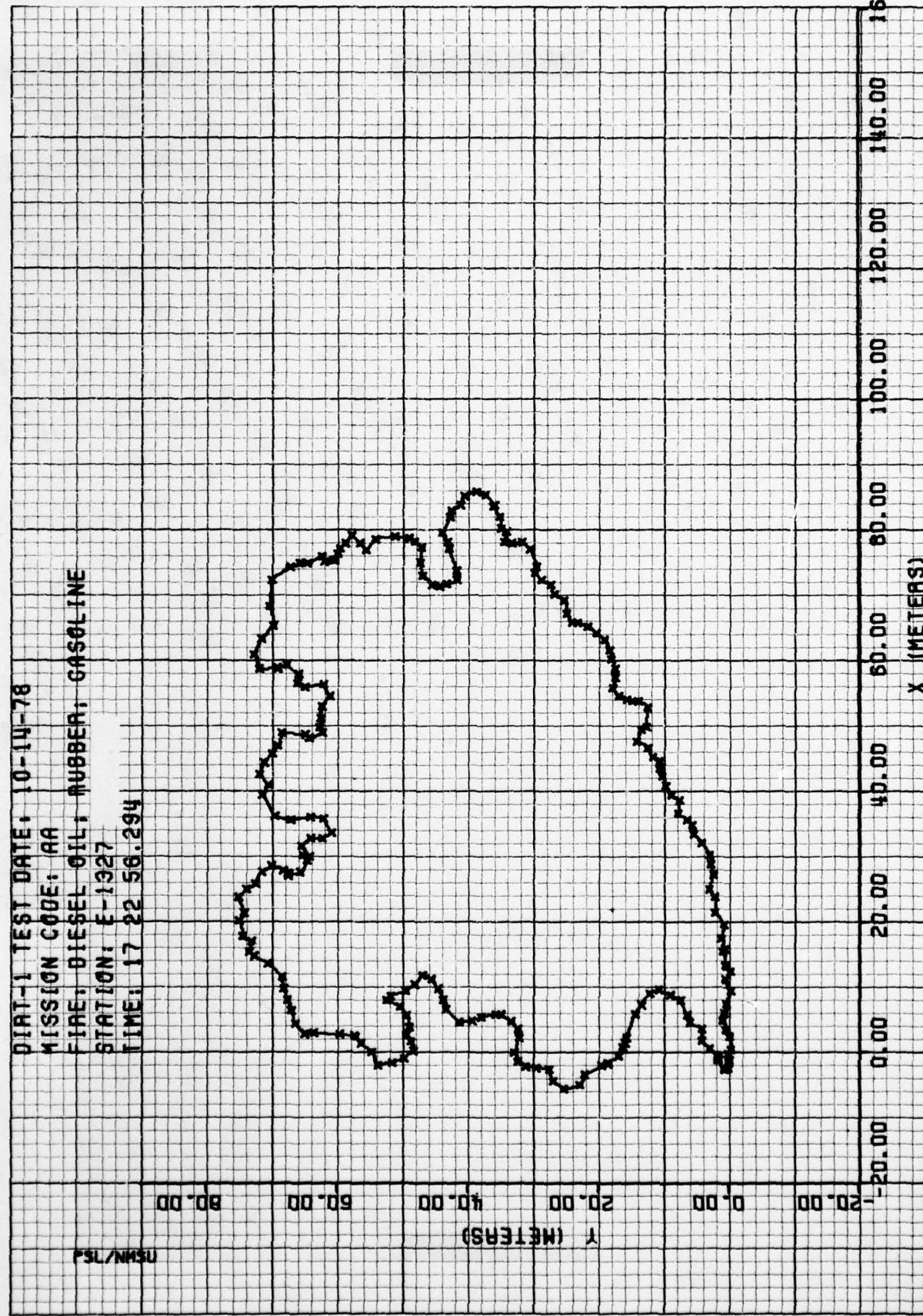
DIRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E-327
TIME: 17 h, 20 m, 38.507 s

PIRAT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL; RUBBER; GASOLINE
STATION: E-1327
TIME: 17 20 38.507



URT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E-1327
TIME: 17 h, 22 m, 56.294 s

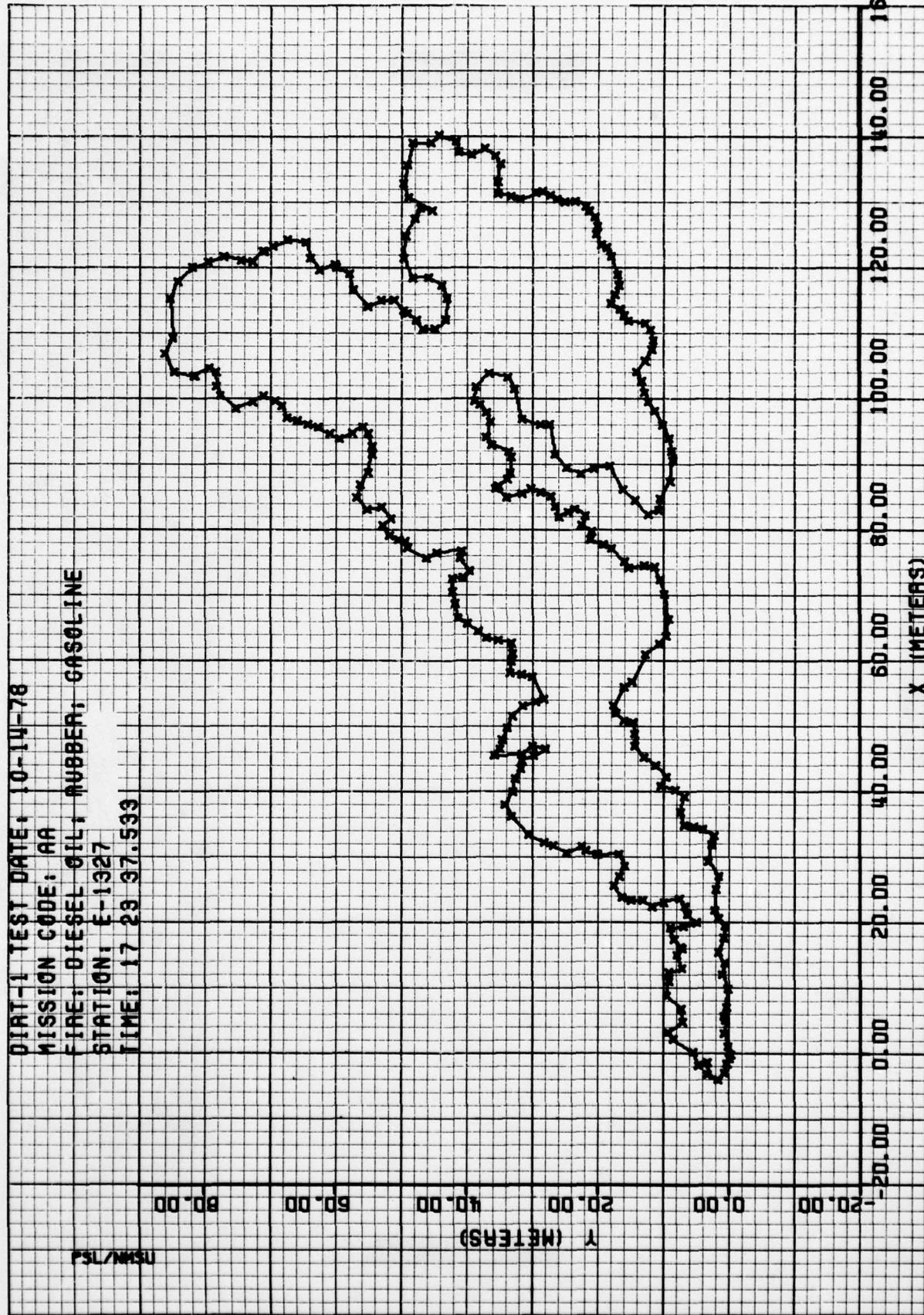
DIRT-1 TEST DATE: 10-14-78
MISSION CODE: RA
FIRE: DIESEL OIL: NUMBER: GASOLINE
STATION: E-1027
TIME: 17 22 56.294



PSL/MSN/178

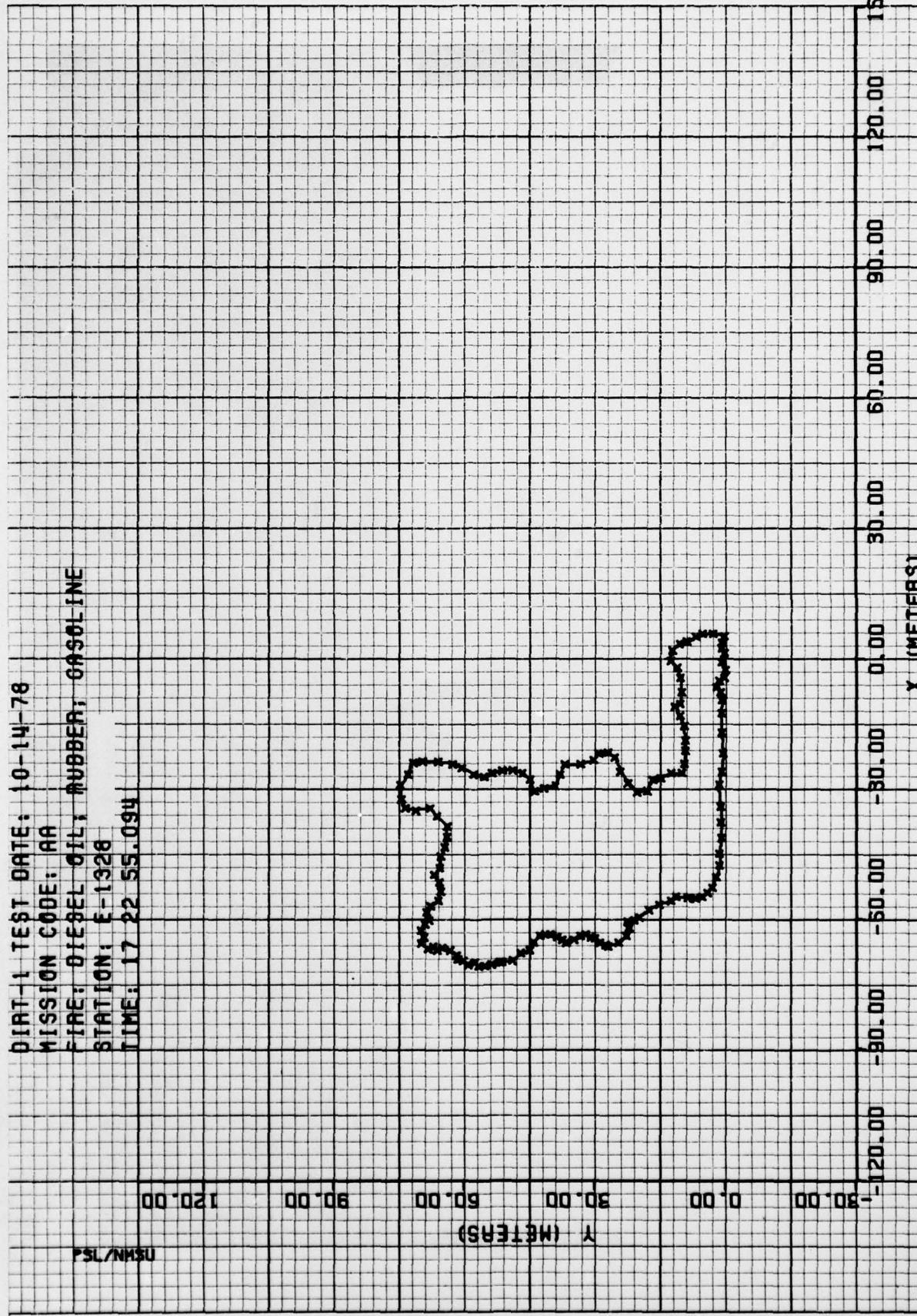
WART I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E- / 327
TIME: 17 h, 23 m, 37.533 s

DIRT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL: RUBBER, GASOLINE
STATION: E-1327
TIME: 17 23 37 539



DIRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E- 1328
TIME: 17 h, 22 m, 55.094 s

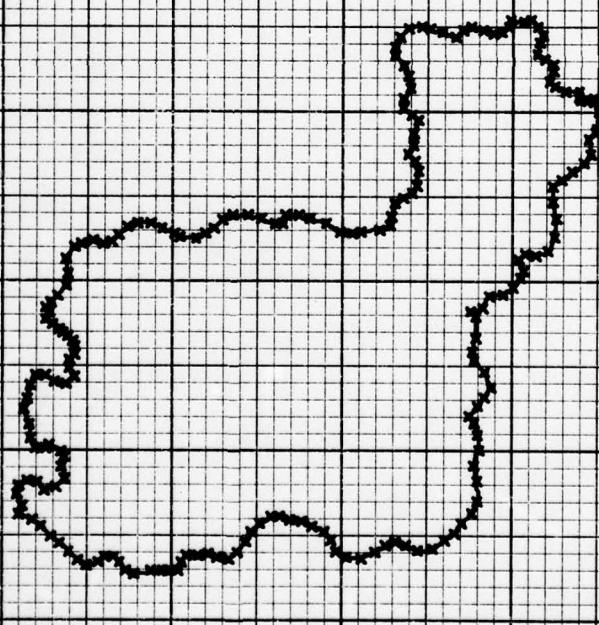
BIRAT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL; RUBBER; GASOLINE
STATION: E-1928
TIME: 17 22 55.094



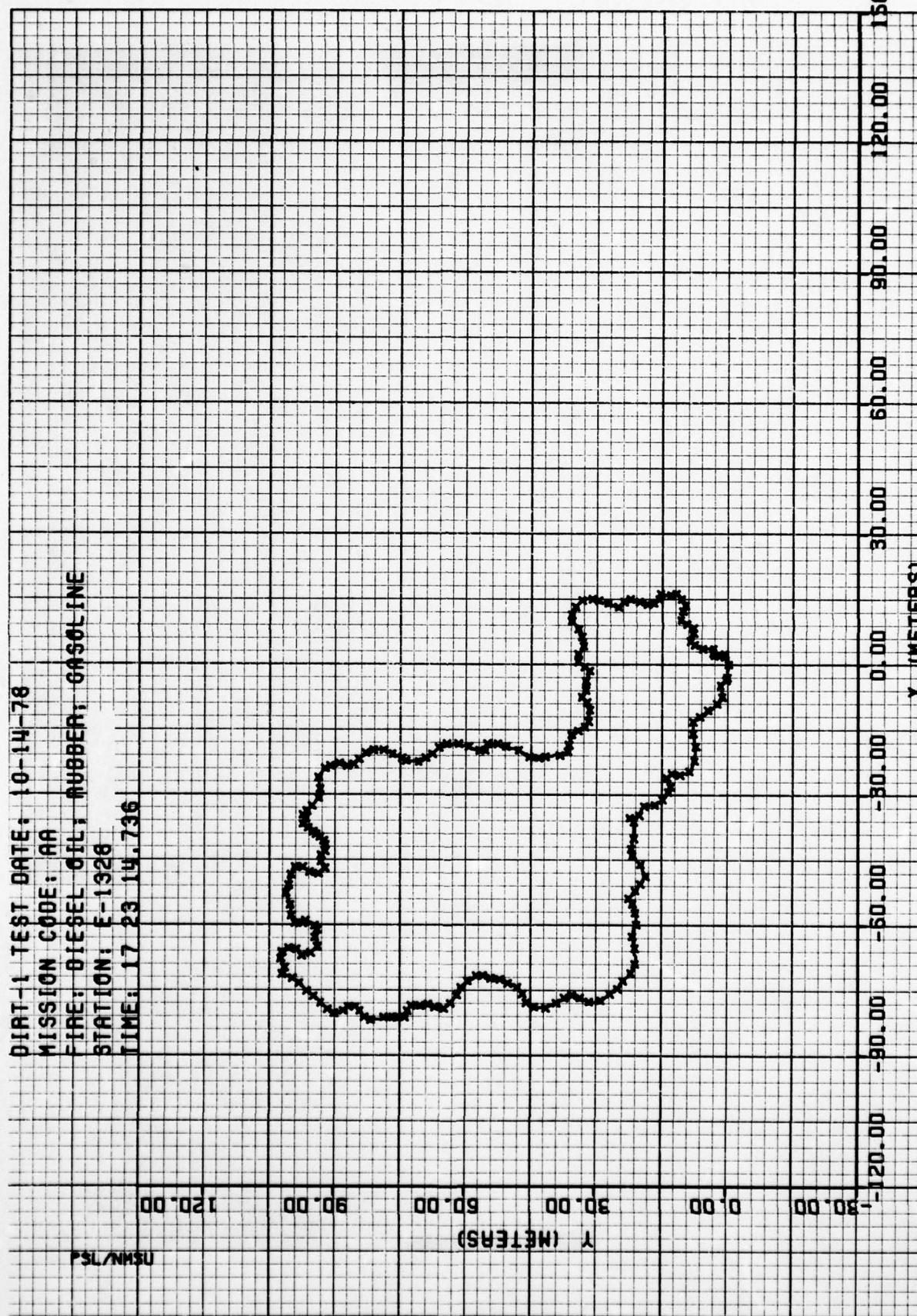
Page D 79

IRT L. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E- 1328
TIME: 17 h, 23 m, 14.736 s

DIRT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL: RUBBER, GASOLINE
STATION: E-1328
TIME: 17 23 14.736

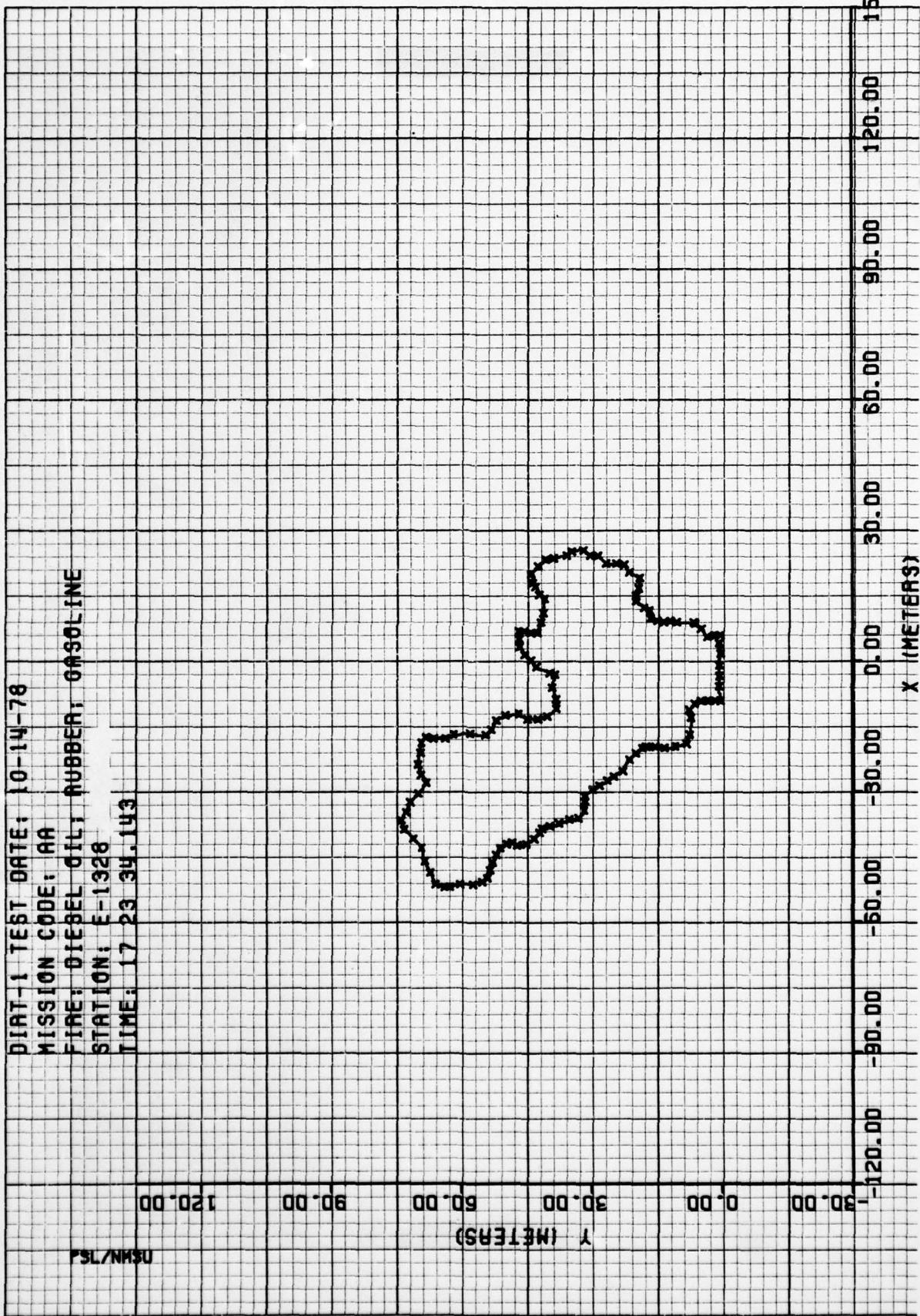


PSL/NMSU



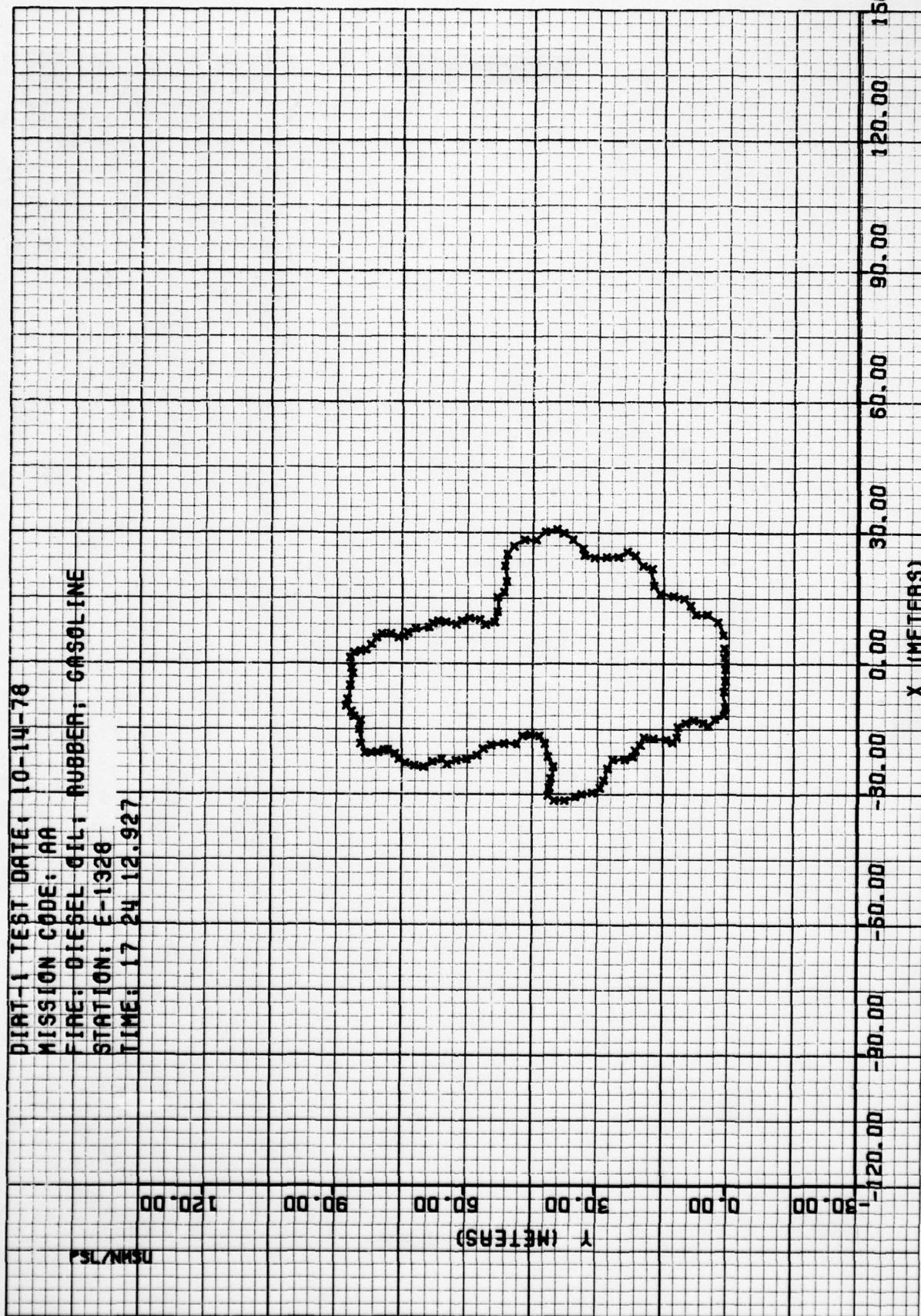
DIRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E- 1328
TIME: 17 h, 23 m, 34.143 s

DIRT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL: RUBBER, GASOLINE
STATION: E-1328
TIME: 17 23 34.143



DIRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E-1328
TIME: 17 h, 24 m, 12 927 s

DIRT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL: RUBBER; GASOLINE
STATION: E-1328
TIME: 17 24 12.927



AD-A076 337

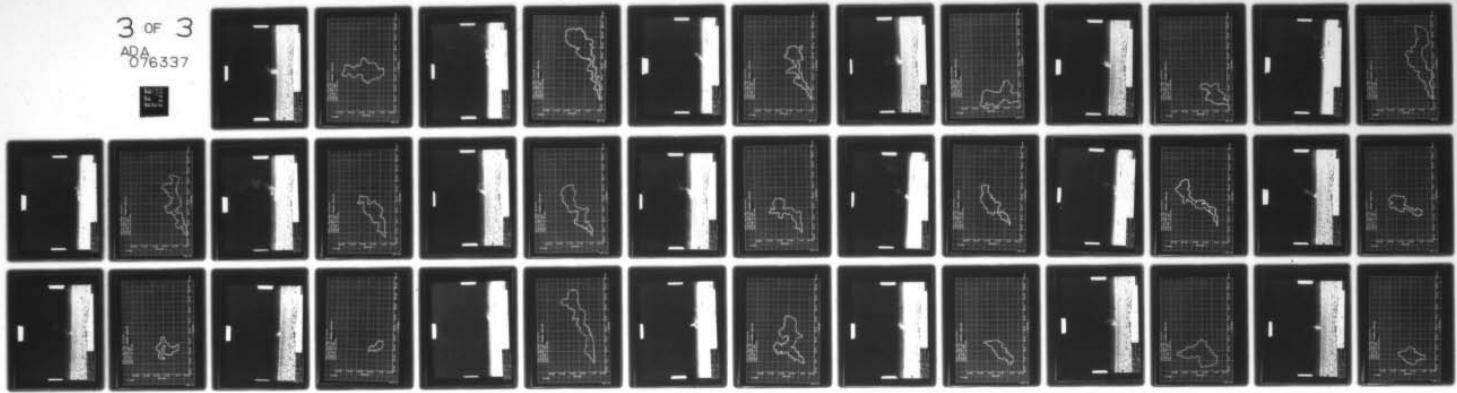
NEW MEXICO STATE UNIV LAS CRUCES PHYSICAL SCIENCE LAB F/G 19/4
FIXED CAMERA DATA DUSTY INFRARED TEST-I (DIRT-I) 2 OCTOBER THRO--ETC(U)
AUG 79 DAAD07-79-C-0008

UNCLASSIFIED

NMSU/PSL/FDR-37179

ERADCOM/ASL-CR-79-0008-1 NL

3 OF 3
ADA
076337



END

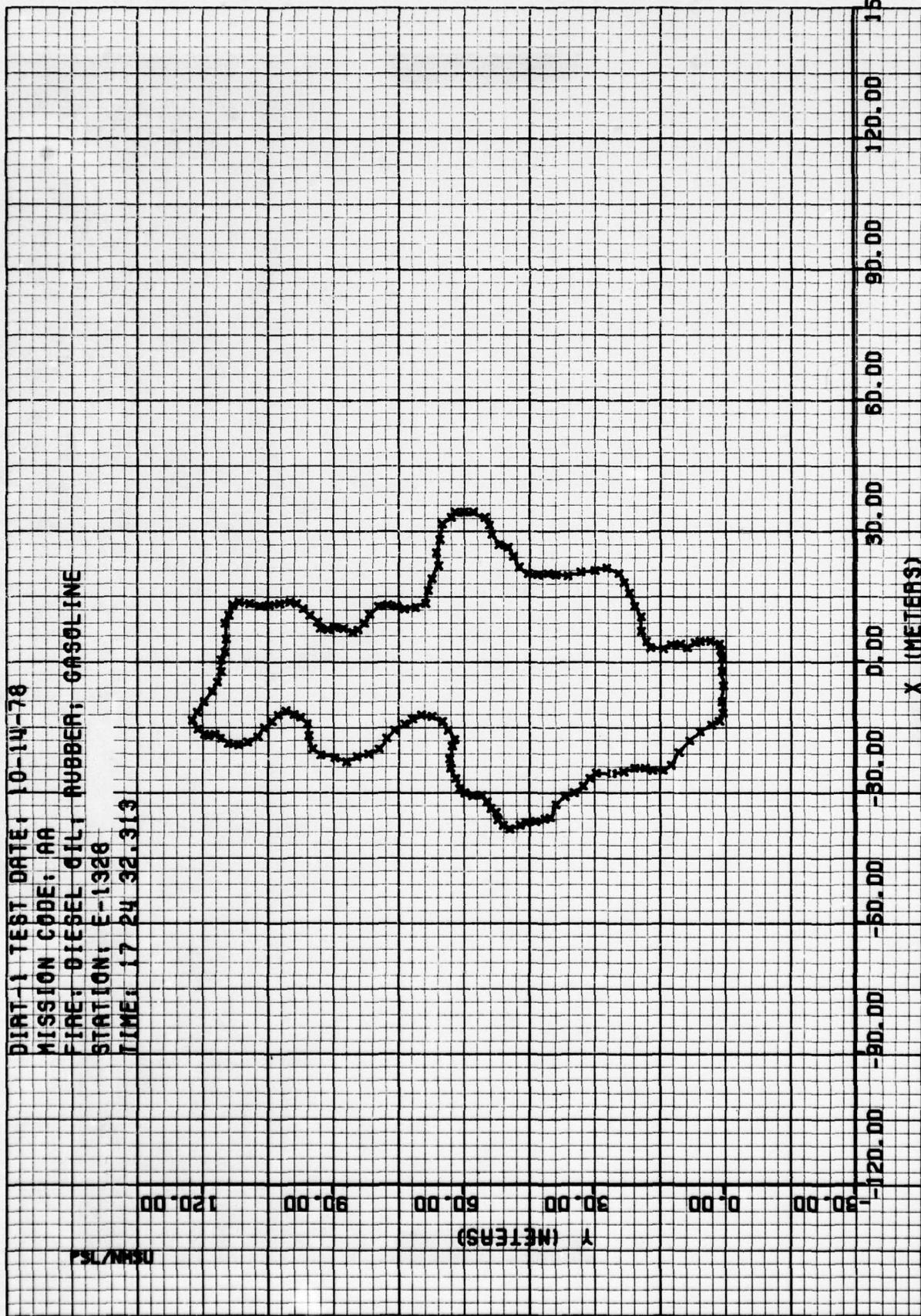
DATE
FILED

11-79

DDC

DIRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E- 328
TIME: 17 h, 24 m, 32.313 s

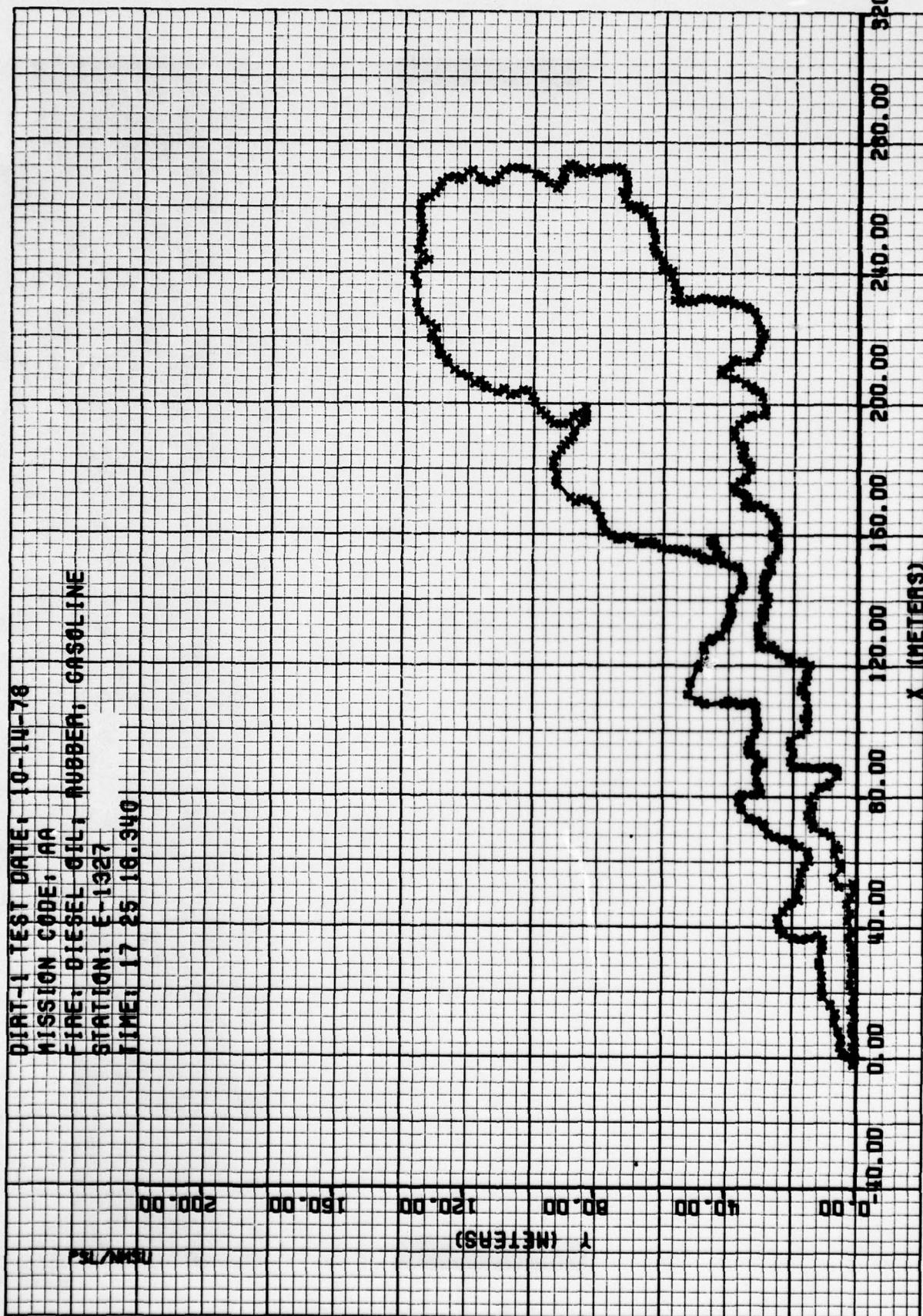
DIRT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL, RUBBER, GASOLINE
STATION: E-1928
TIME: 17 24 32.313



PSW/MSW

DIRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E-1327
TIME: 12 h, 25 m, 16.340 s

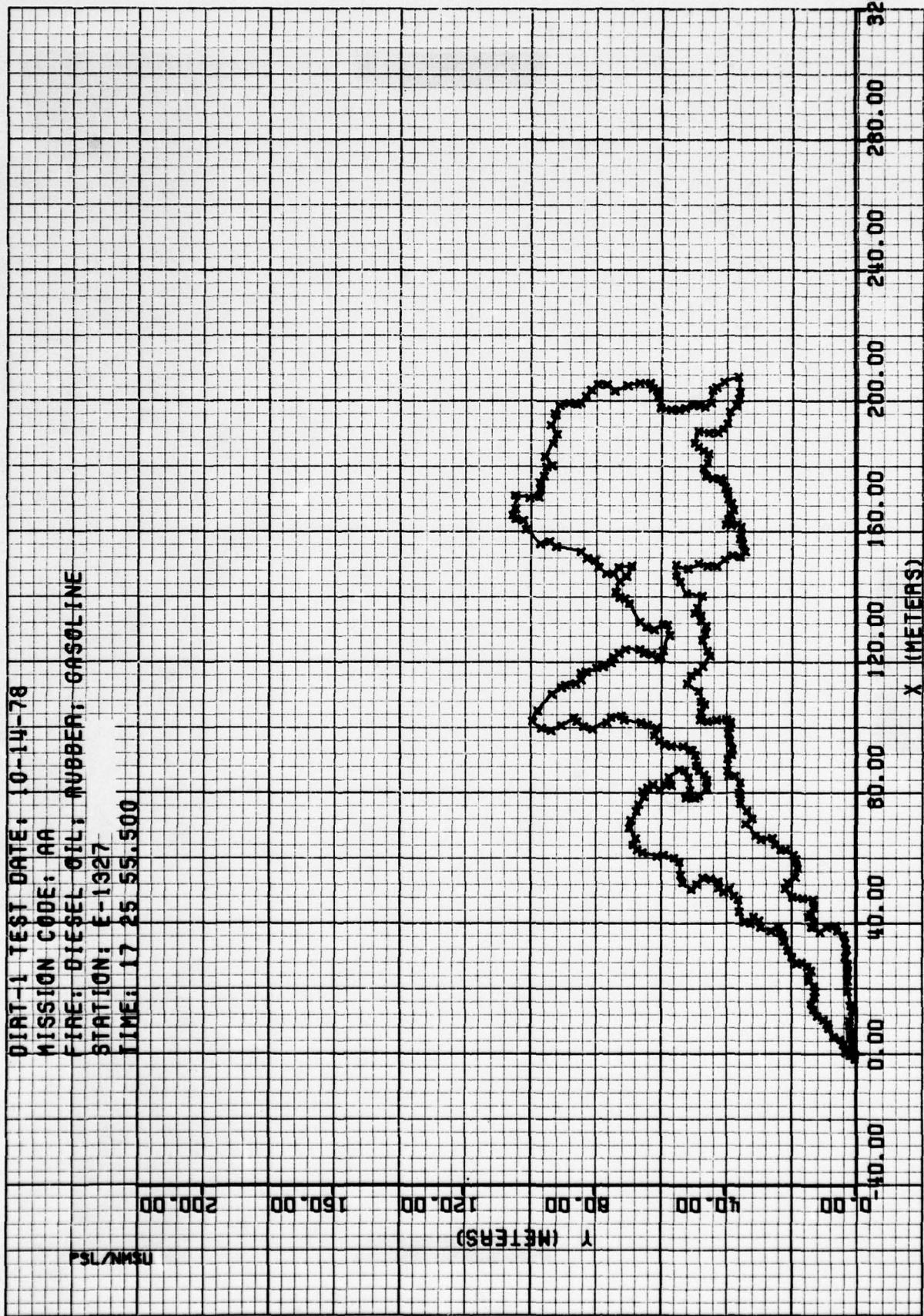
DIRT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL 95% RUBBER, GASOLINE
STATION: E-1327
TIME: 17 25 10.340



PSL/MSW

DIRT 1. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E- 1327
TIME: 17 h, 25 m, 55.500 s

DIRT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL: NUMBER: GASOLINE
STATION: E-1 3227
TIME: 12 25 55.500

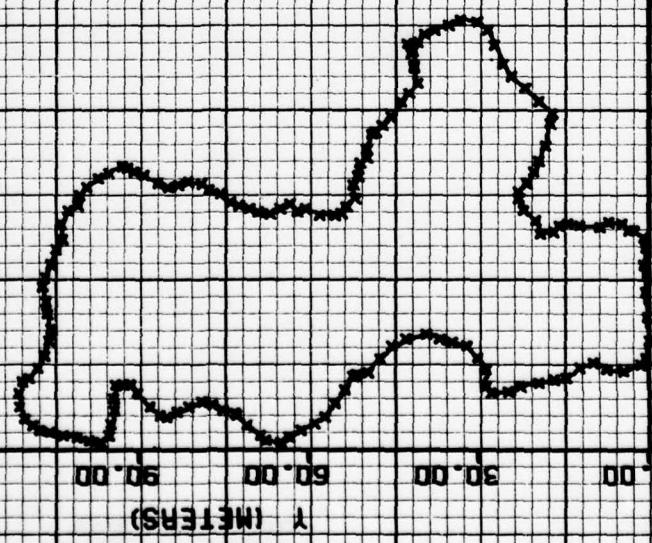


DIRT L. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E-328
TIME: 17 h, 25 m, 19.994 s

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DATA-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE, DIESEL OIL, RUBBER, GASOLINE
STATION: E-1326
TIME: 17 25 19.994

PSL/MSW





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WRT I. Test Date: 10-14-1978

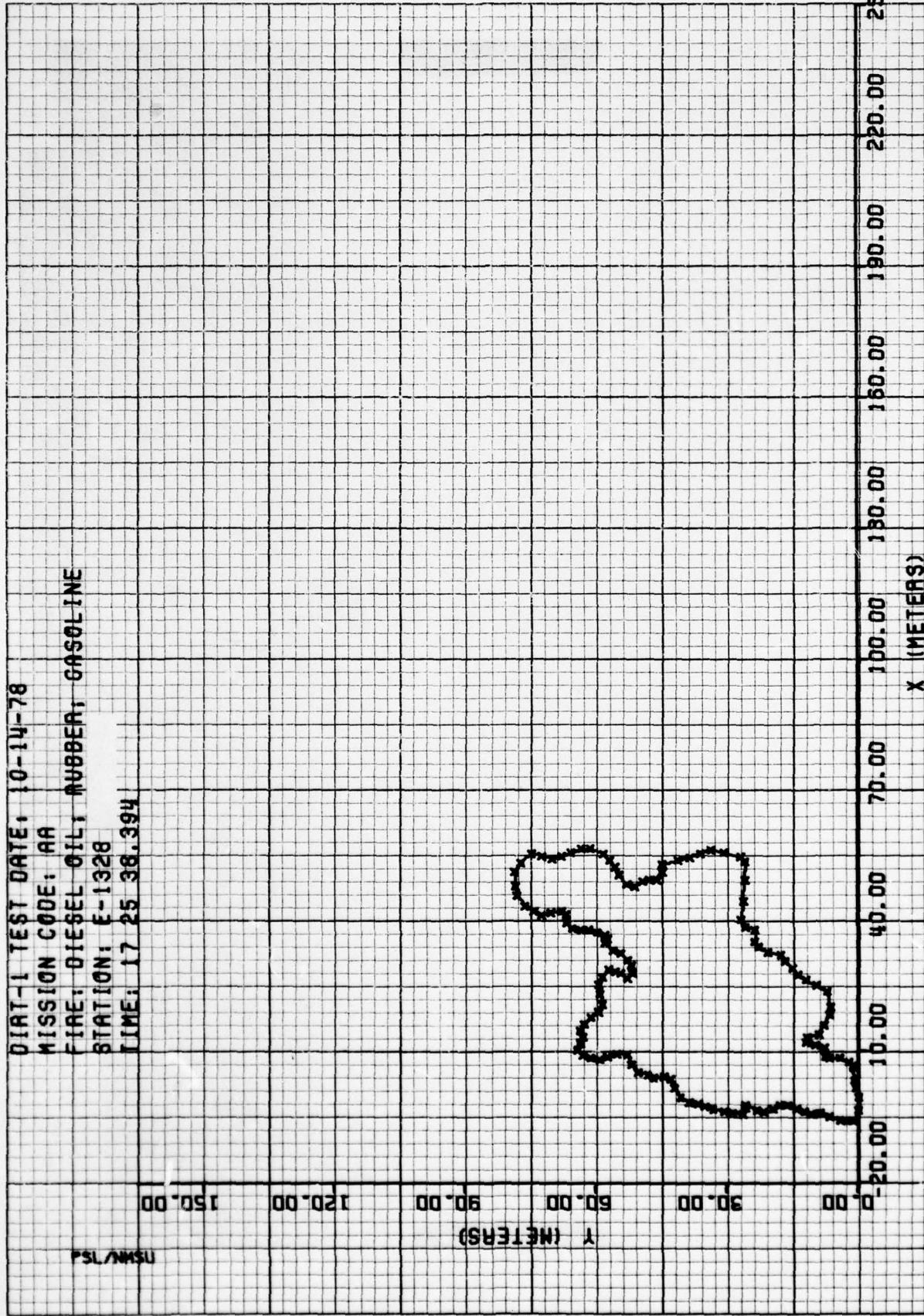
Mission Code: AA

Fire: Diesel oil; rubber; gasoline

STATION: E-328

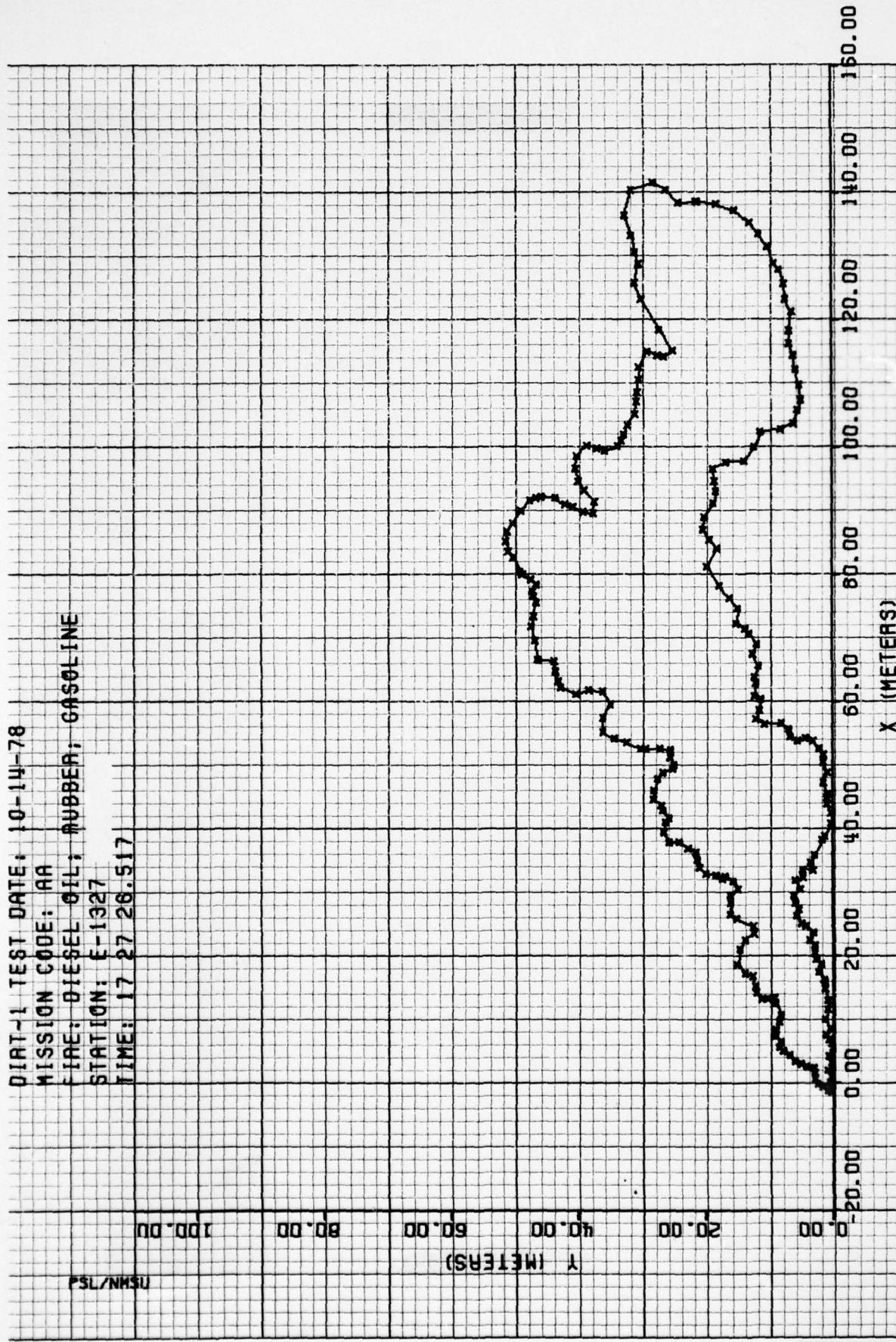
TIME: 27 h, 25 m, 28.394 s

DIAT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL; RUBBER; GASOLINE
STATION: E-1328
TIME: 17 25 38.394



TEST I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E- / 327
TIME: 17 h, 27 m, 26.517 s

PIRT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL: RUBBER, GASOLINE
STATION: E-1327
TIME: 17 27 28.517



DIRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E- / 327
TIME: 17 h, 28 m, 02. 55 s

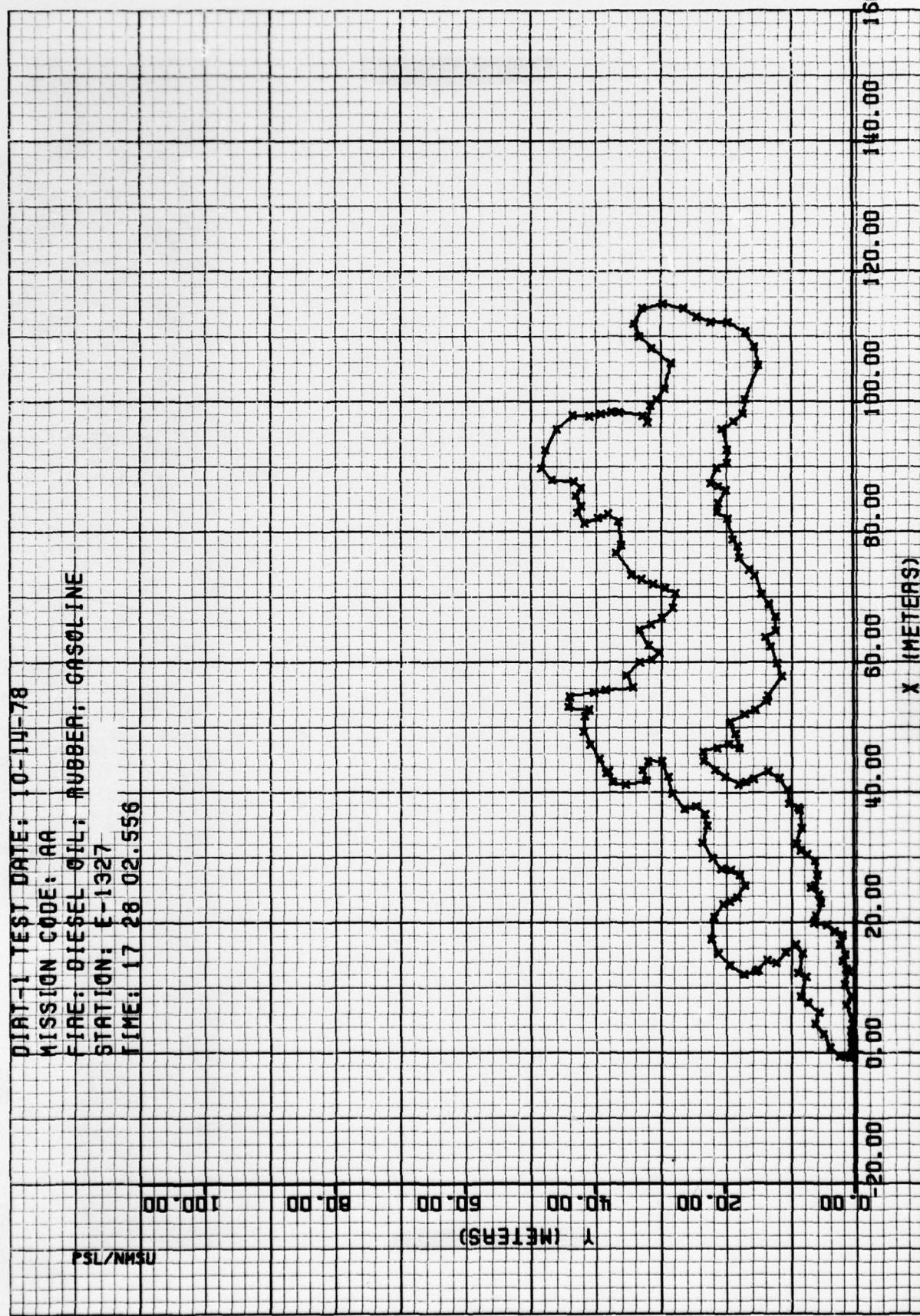
DATA-1 TEST DATE: 10-14-78

MISSION CODE: AA

FIRE: DIESEL OIL, RUBBER, GASOLINE

STATION: E-1327

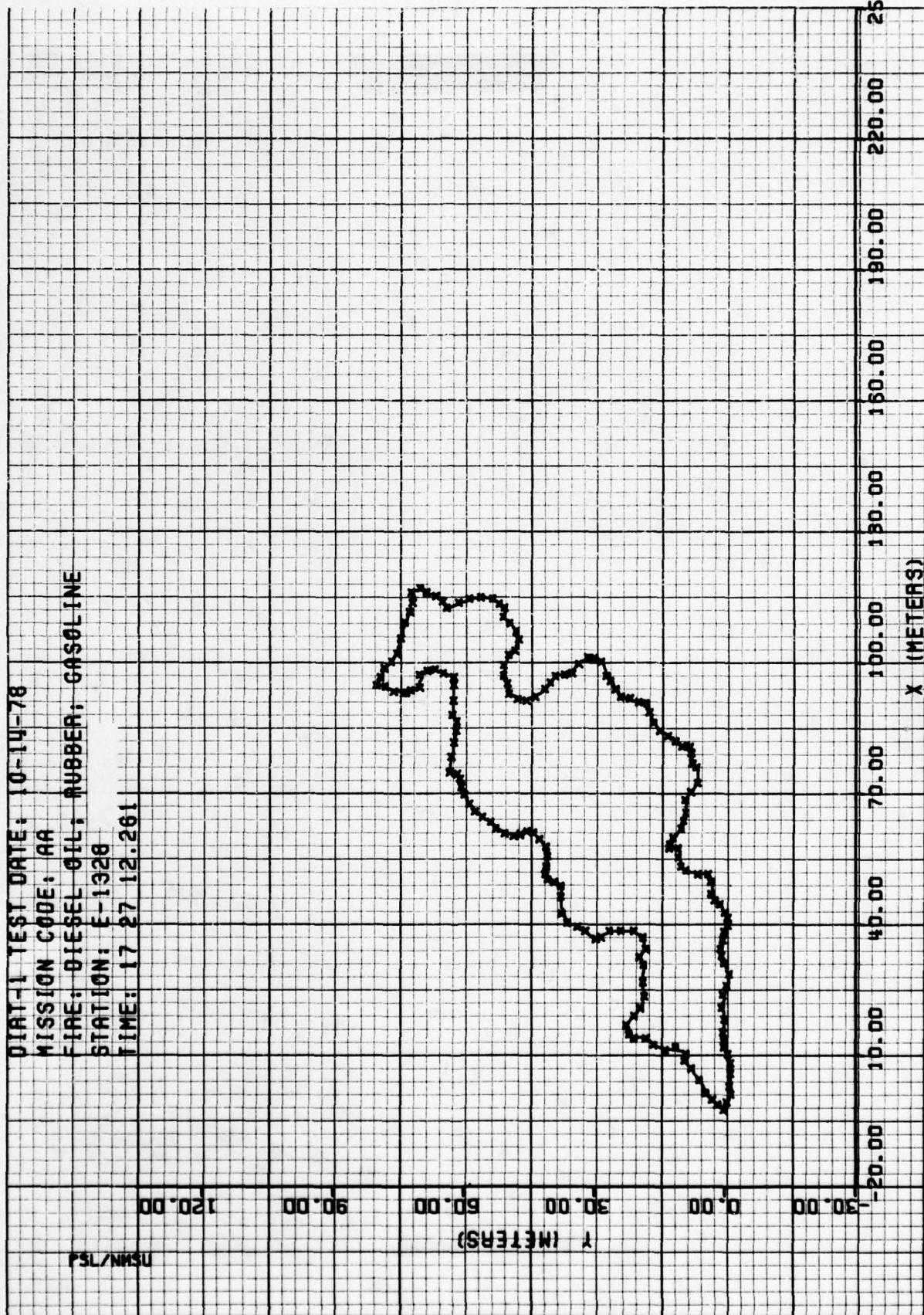
TIME: 17 28 02.556



PSL/NMN/15D

DIRT L. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E-1328
TIME: 17 h, 27 m, 12.261 s

DATA-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL, RUBBER, GASOLINE
STATION: E-1328
TIME: 17 27 12.261



PSM/TSN

DIRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E-1328
TIME: 17 h, 27 m, 31.700 s

DIRT-1 TEST DATE: 10-14-78

MISSION CODE: AA

FIRE: DIESEL OIL: RUBBER, GASOLINE

STATION: E-1328

TIME: 17 27 31.700

-30.00 -20.00 -10.00 10.00 40.00 70.00 100.00 130.00 160.00 190.00 220.00 250.00

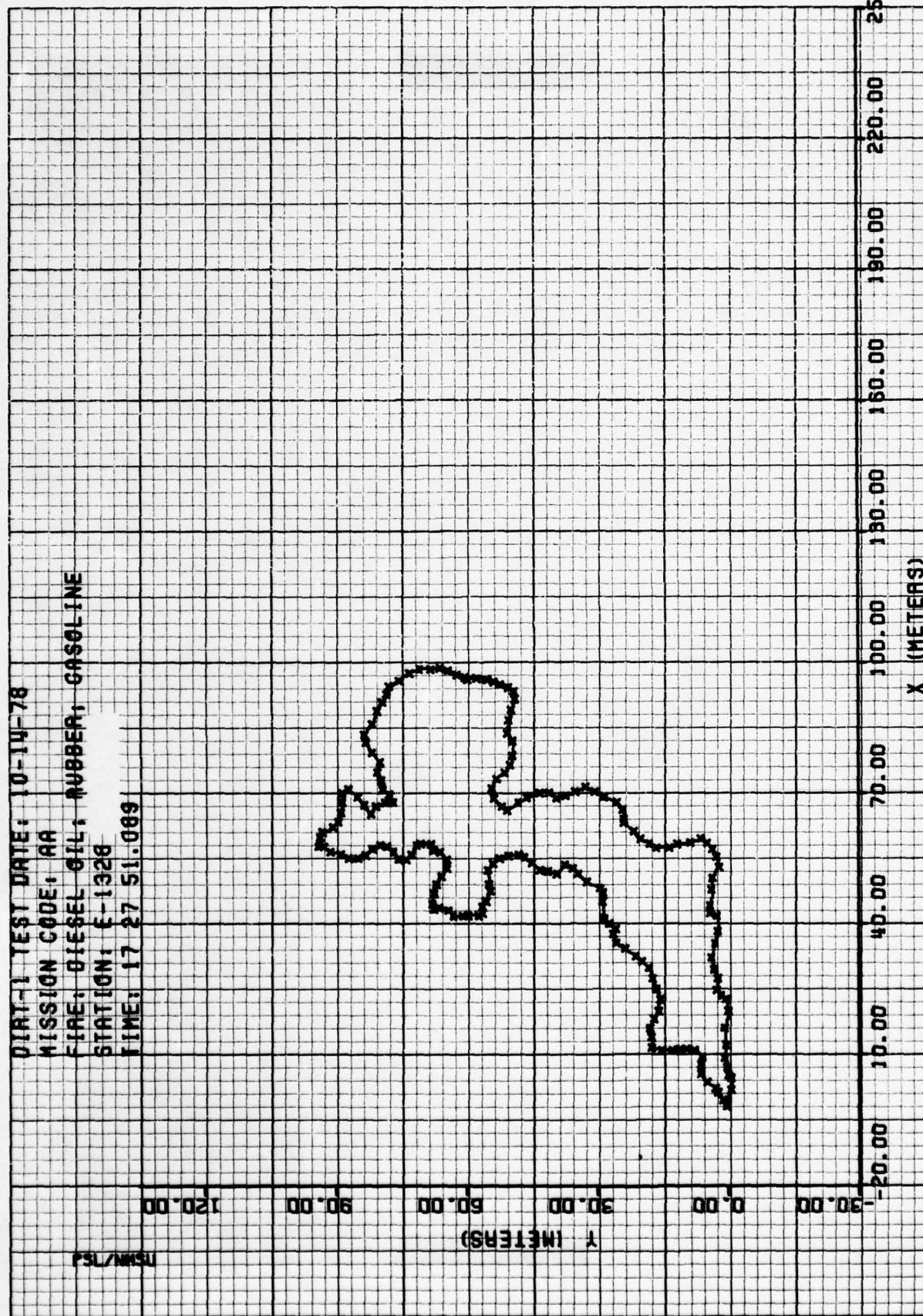
120.00 90.00 60.00 30.00 0.00

Y (METERS)

NSNN/PSL

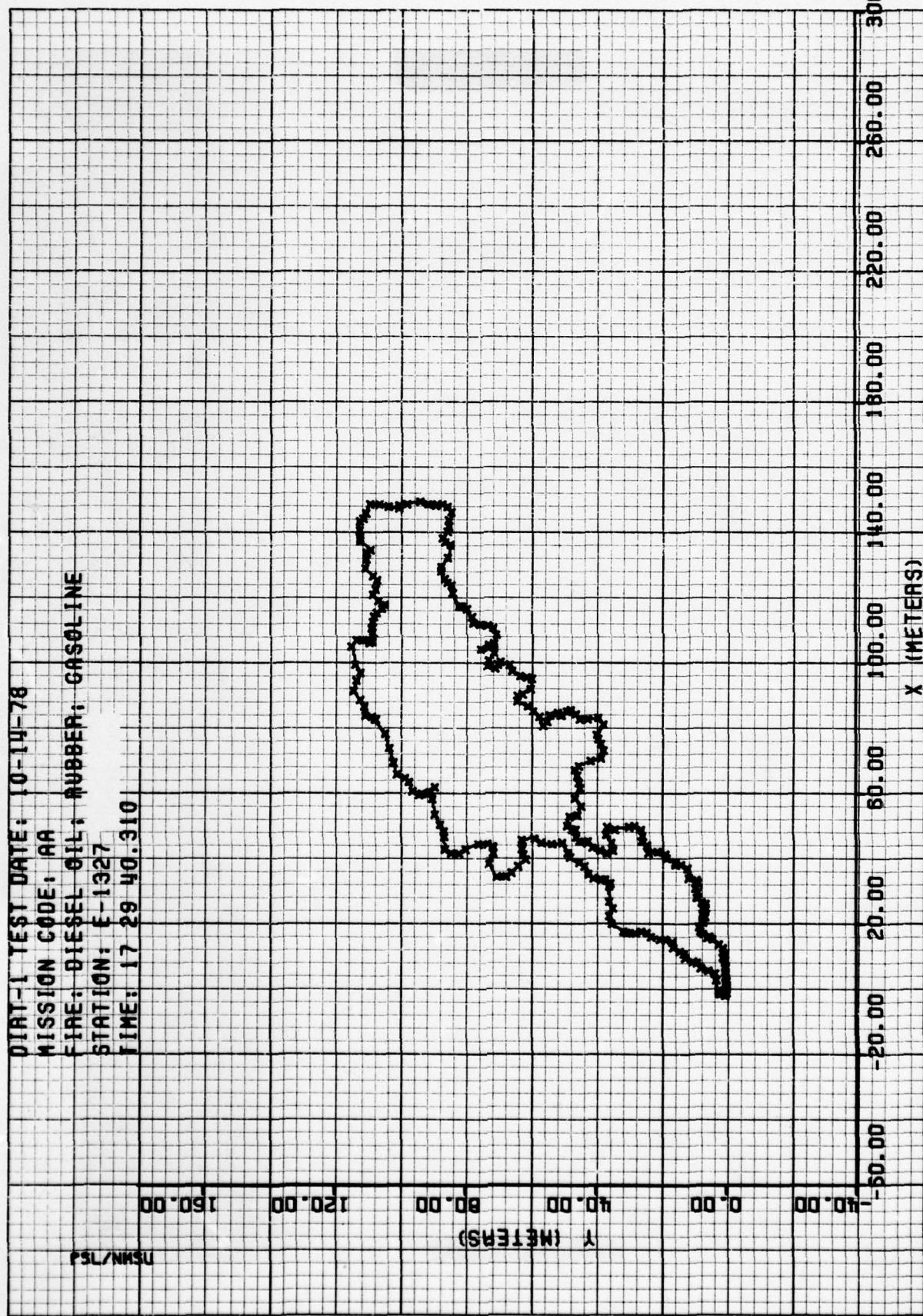
DIRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber: gasoline
STATION: E- 1328
TIME: 17 h, 27 m, 51.089 s

DIRT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL, RUBBER, GASOLINE
STATION: E-1328
TIME: 17 27 51.089



DIRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E- 1327
TIME: 17 h, 29 m, 40.310 s

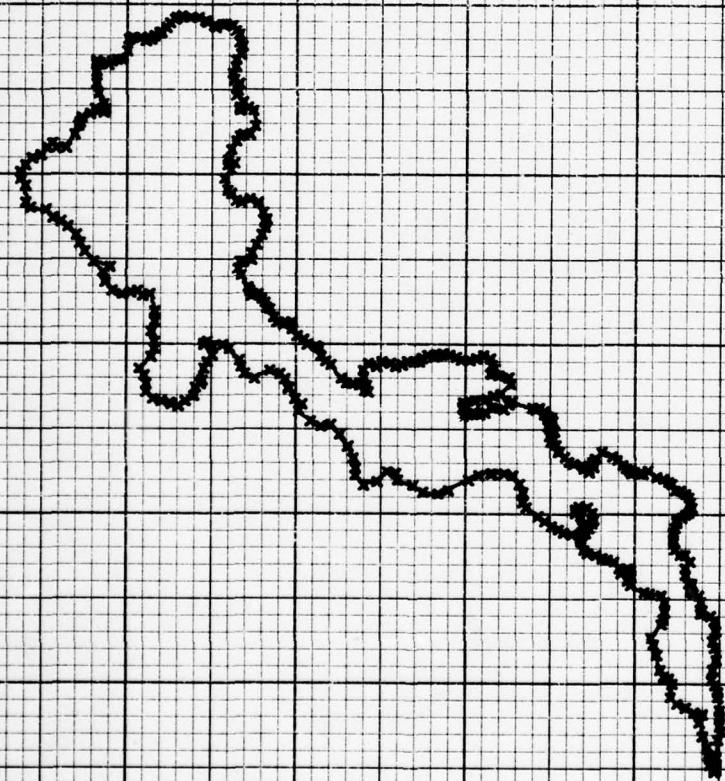
PIRT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL, RUBBER, GASOLINE
STATION: E-1327
TIME: 17 29 40.310



DIRT L. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E- / 327
TIME: 17 h, 30 m, 00.000 s

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PIRT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL, RUBBER, GASOLINE
STATION: E-1327
TIME: 17 30 04.900



-100.00 0.00 40.00 80.00 120.00 160.00

Y (METERS)

NSMN/PSL

-60.00 -20.00 20.00 60.00 100.00 140.00 180.00 220.00 260.00 300.00

X (METERS)

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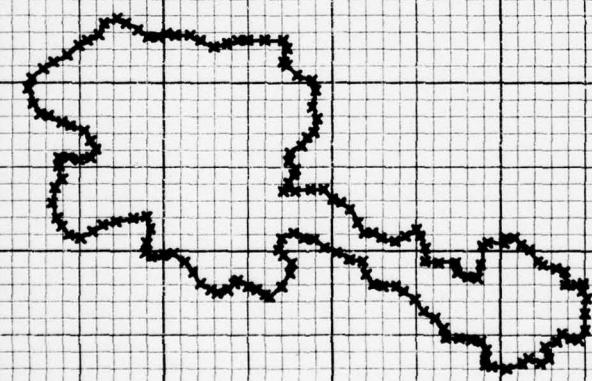
DIRT 1. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E- 1328
TIME: 17 h, 22 m, 34.240 s

DIAT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL, RUBBER, GASOLINE
STATION: E-1328
TIME: 17 29 34.240

PSM/PSM

-30.00 0.00 30.00 60.00 90.00 120.00

Y (METERS)

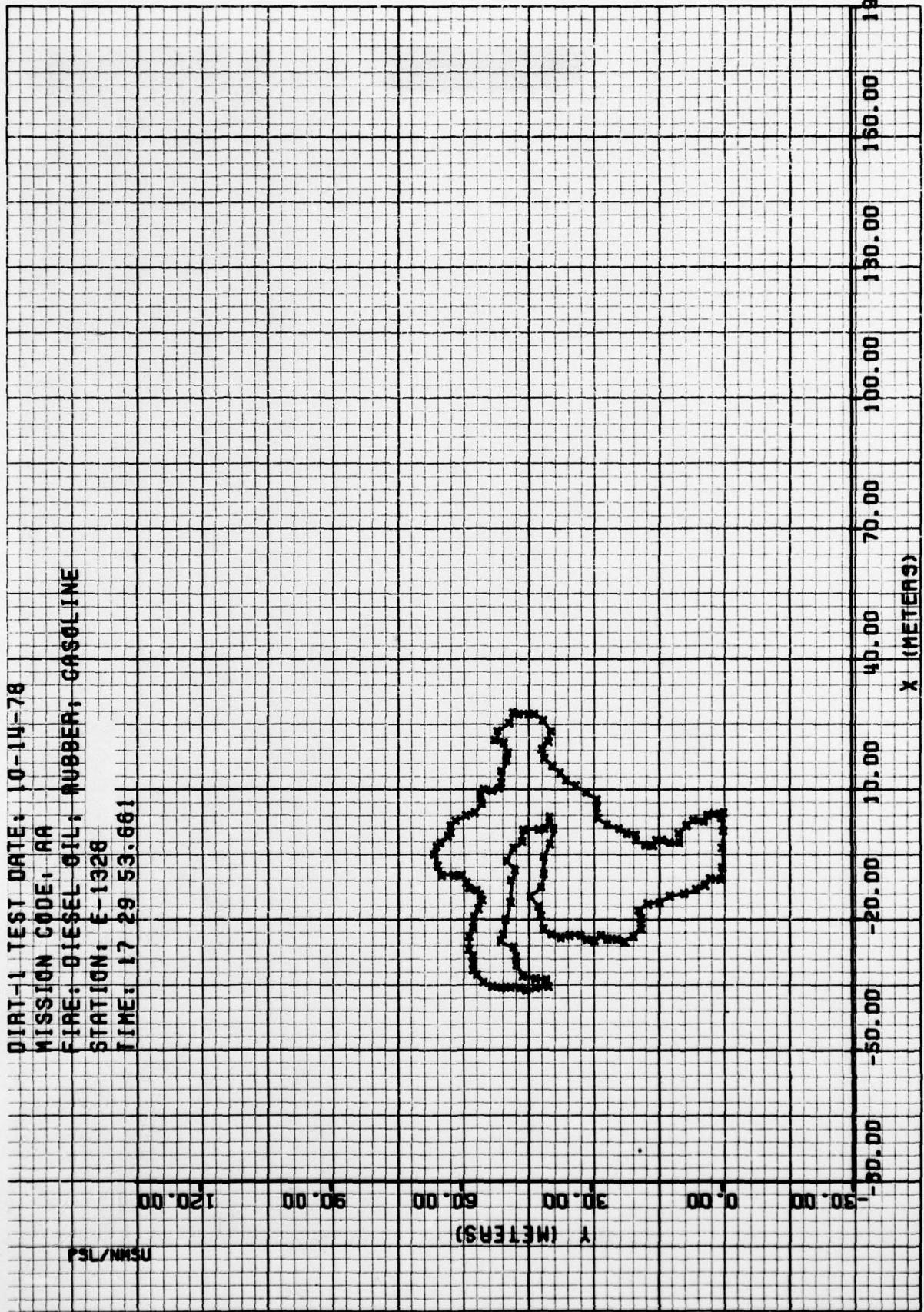


-80.00 -50.00 -20.00 10.00 40.00 70.00 100.00 130.00 160.00 190.00

X (METERS)

IRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E-1328
TIME: 22 h, 29 m, 53.661 s

DIRT-1 TEST DATE: 10-14-78
MISSION CODE: RA
FIRE: DIESEL OIL: RUBBER, GASOLINE
STATION: E-1328
TIME: 17 29 53.661



DIRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E-1328
TIME: 17 h, 20 m, 13.044 s

PIRT-1 TEST DATE: 10-14-78

MISSION CODE: AA

FIRE: DIESEL FTL, RUBBER, GASOLINE

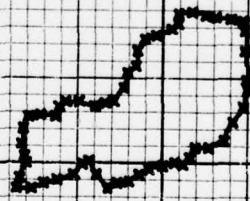
STATION: E-1328

TIME: 17 30 13.044

-90.00 -50.00 10.00 40.00 70.00 100.00 130.00 160.00 190.00

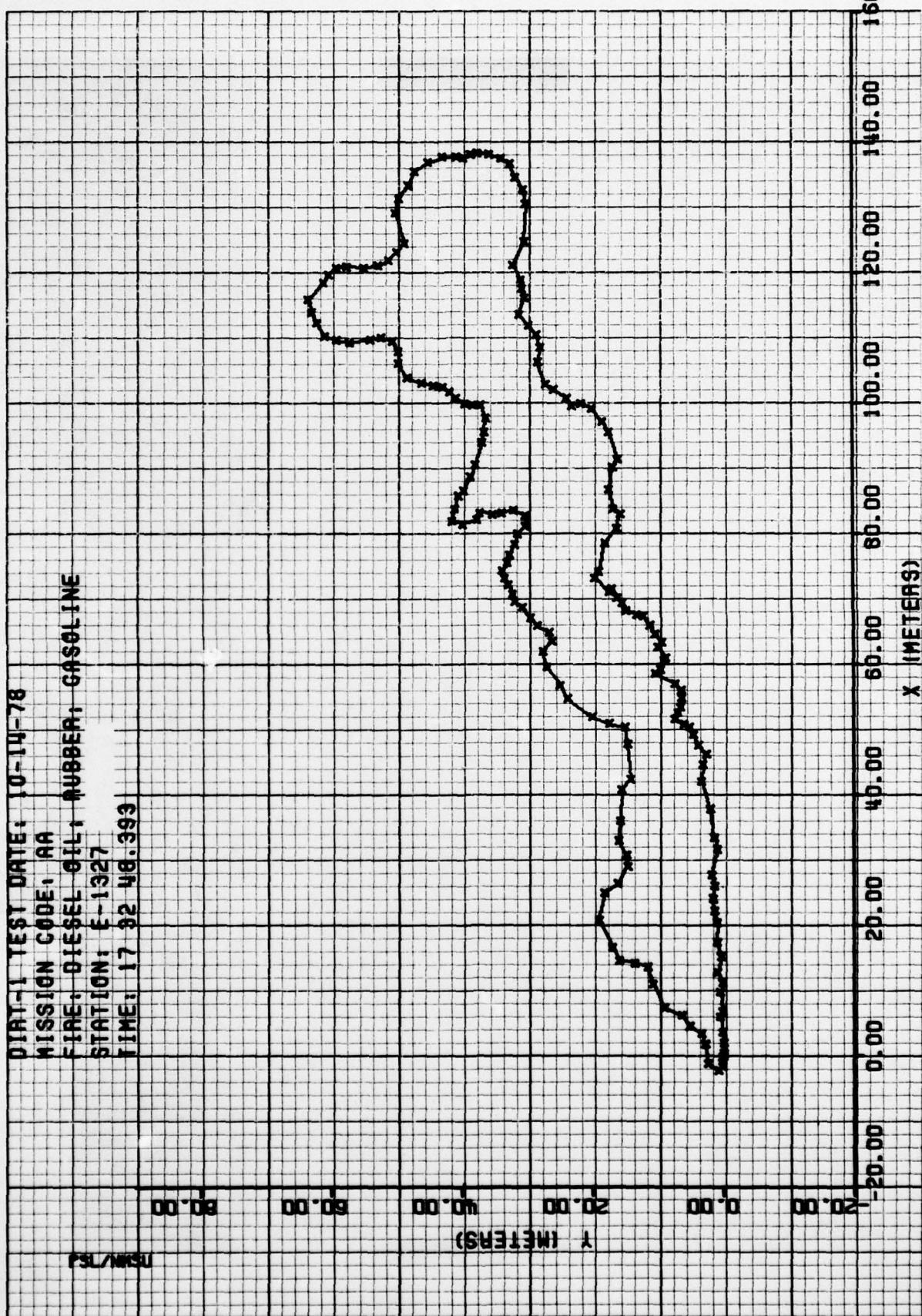
Y (METERS)

PSL 15MM/15M



DIRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E-1327
TIME: 17 h, 32 m, 48.393 s

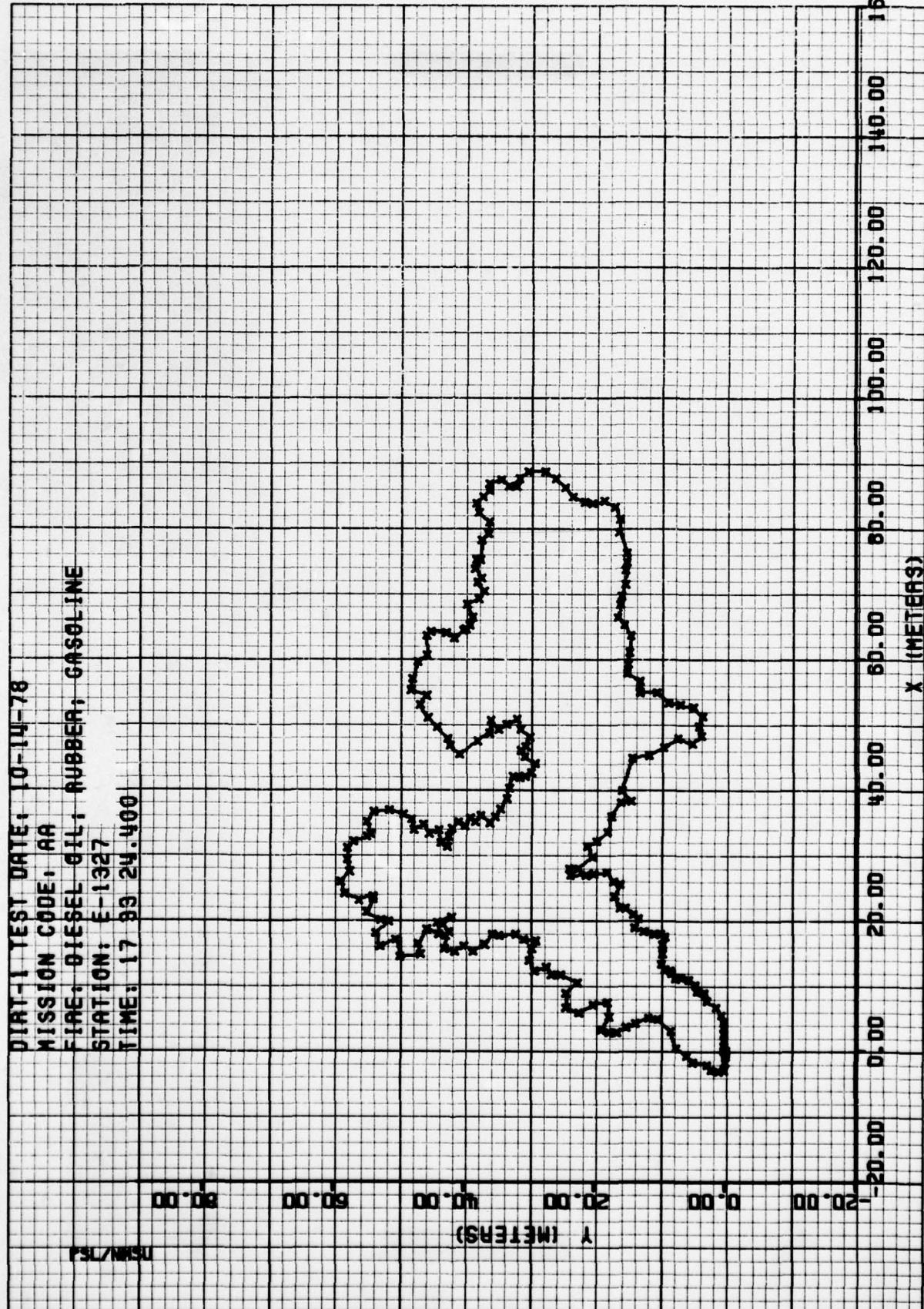
DIRT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL: RUBBER, GASOLINE
STATION: E-1327
TIME: 17 32 48.393



NSW/N/PS

DIRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E- 1327
TIME: 17 h, 33 m, 24 s 400 s

DIRT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL GEL, RUBBER, GASOLINE
STATION: E-1327
TIME: 17 33 24.400



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DIRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E- 1328
TIME: 17 h, 32 m, 43.204 s

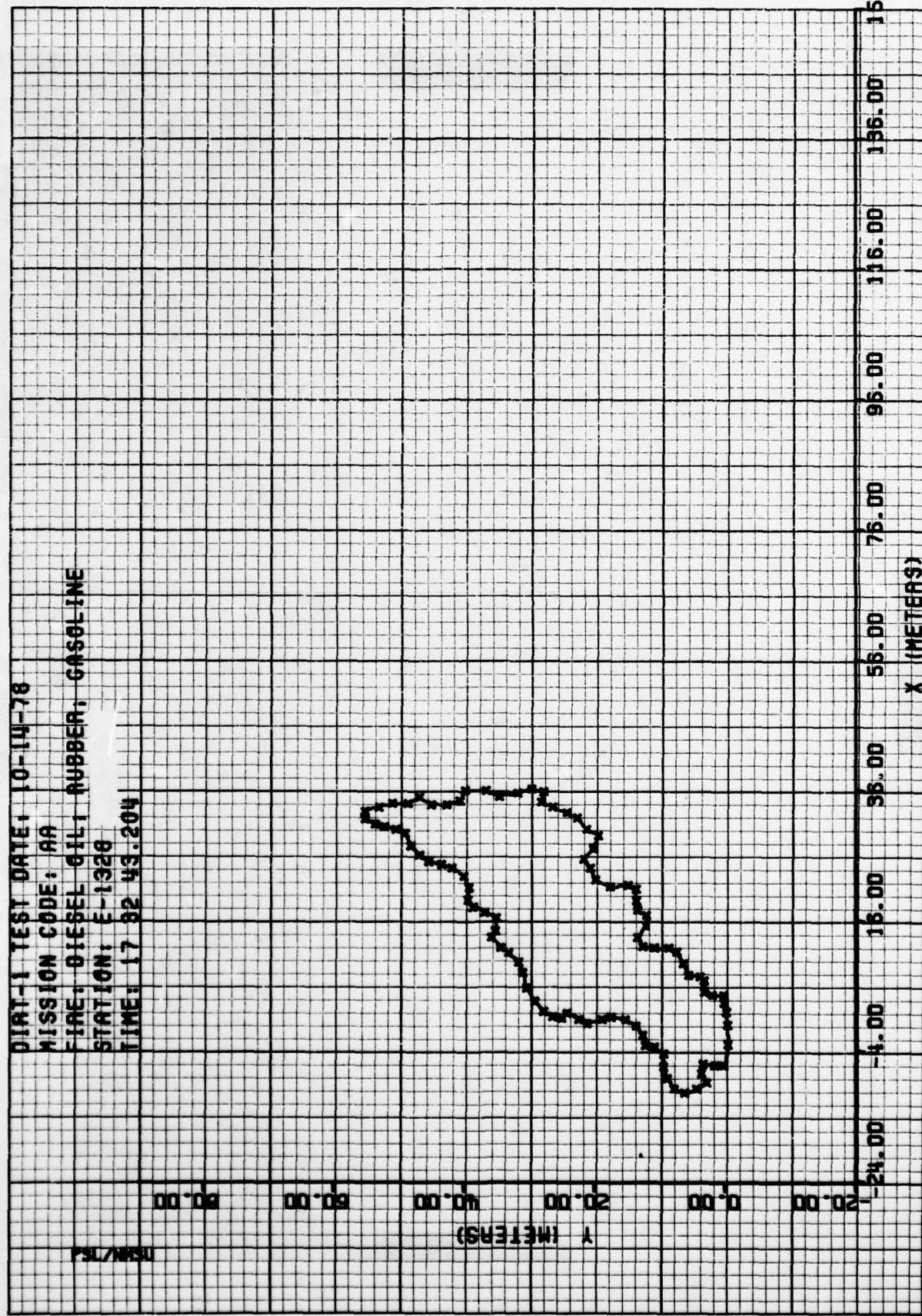
DIRT-1 TEST DATE: 10-14-78

MISSION CODE: AA

FIRE: DIESEL OIL, RUBBER, GASOLINE

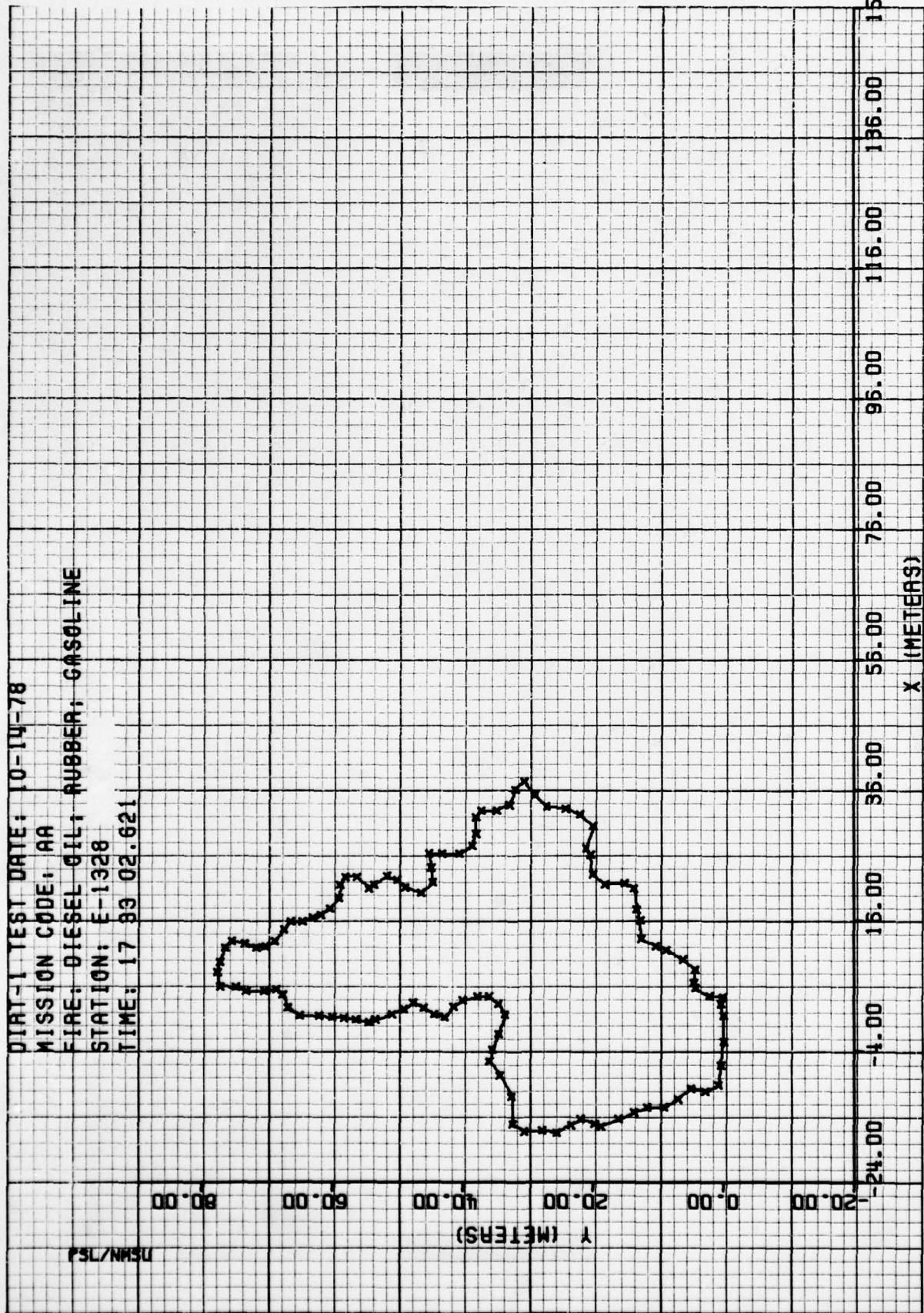
STATION: E-1328

TIME: 17 02 43.204



DIRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E- 1328
TIME: 17 h, 23 m, 02. 621 s

DIRT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL; RUBBER, GASOLINE
STATION: E-1328
TIME: 17 33 02.621





DIRT I. Test Date: 10-14-1978
Mission Code: AA
Fire: Diesel oil; rubber; gasoline
STATION: E-328
TIME: 17 h, 33 m, 21 997 s

DIAT-1 TEST DATE: 10-14-78
MISSION CODE: AA
FIRE: DIESEL OIL, RUBBER, GASOLINE
STATION: E-1 328
TIME: 17 39 21.997

